

INDEX

Forty-fourth Quarto Volume—January 1, 1908, to May 29, 1908

AUTHORS

Allen, C. F., 499
Arkenburgh, W. H., 434, 479
Arnold, B. J., 273, 304, 406, 737
Auerbach, R. R., 363

Barr, J. M., 112
Belsterling, C. S., 272
Boardman, W. H., 144
Brazier, F. W., 238
Breed, C. B., 358
Brent, Theodore, 530
Brown, W. C., 744
Browning, Charles, Jr., 499
Bush, S. P., 118
Byers, M. L., 372

Cahill, J. R., 188
Carnegie, Andrew, 699
Carpenter, F. G., 220
Caruthers, C. H., 507
Cavanagh, J. R., 697
Cease, D. L., 270
Colson, C., 573, 721
Colvin, W. J., 569
Cothingham, W. H., 99
Crawford, J. C., 569
Crawford, J. G., 49
Crosby, C. H., 225
Cryderman, J. J., 663

Dalby, H. A., 668
Damon, G. A., 59
Deems, J. F., 196
Delano, F. A., 277, 681
Dewsnup, Prof. E. R., 706
Dreher, W. C., 211
Dunn, Maj. B. W., 508

Edmonds, R. H., 651
Emerson, Harrington, 272
Estep, H. C., 356

Flero, S. T., 49
Fish, Stuyvesant, 287, 710
Fleming, Robert, 533
Flory, B. P., 283
Forman, H. W., 598
Forney, M. N., 82

Fowler, G. L., 30, 114, 155, 210
Fry, L. H., 48, 530

Gardner, W. A., 63
Gibbs, George, 474
Goodwin, J. M., 242
Goss, Prof. W. F. M., 464, 562
Griffin, P. H., 110, 694

Haarman, Dr. Ing. A., 417, 447, 484
Hale, Arthur, 501
Hanna, D. B., 157
Harrell, J. J., 693
Hart, J. H., 629
Hawks, J. D., 49
Haynes, Thornwell, 633
Hazelton, Hugh, 473
Heinle, A. W., 146, 569
Henderson, G. R., 238, 272
Howard, J. E., 439
Howe, M. A., 352

Jacobs, C. M., 399
Jones, C. W., 365

Kellogg, R. S., 710
Kerr, W. C., 474

Lamme, B. G., 474
Latimer, J. B., 694
Learnard, M. H., 597

McClellan, William, 474
McCrea, Mrs. A. E., 185
McIntosh, William, 241
M'Kernan, E. J., 286
McPherson, L. G., 649
M'Veigh, E. J., 597
Mackay, C. H., 261
Mather, Robert, 530, 672
Mershon, R. D., 187
Morton, Dr. Henry, 89
Murphy, B. S., 466
Murray, W. S., 474

Newman, W. H., 455
North, E. P., 498

O'Donnell, J. P., 148

Ommeganck, E., 642
Ommelange, E., 91

Paley, W. B., 548
Pardee, J. H., 628
Park, A. E., 130
Park, W. L., 48
Parsons, W. B., 726
Payne, J. L., 123
Perrin, A. T., 175
Pigg, J., 214, 251
Prout, H. G., 237

Rea, Samuel, 649
Rettinghouse, H., 363
Ripley, C. M., 374
Rogers, R. H., 113
Roosevelt, Theodore, 325
Ross, H. H., 337

Sanderson, R. P. C., 243
Saward, F. W., 175
Schoen, C. T., 336
Seley, C. A., 243
Sells, E. W., 371
Shakespeare, F. H., 342
Sims, C. S., 80
Smith, J. R., 63, 92, 125, 161, 192,
222, 256, 287, 318, 376, 413, 449,
481, 514, 540, 581, 605, 638
Snow, J. P., 444
Stillwell, L. B., 473
Stone, W. S., 293

Tait, Thomas, 98
Thayer, Walter, 678
Thorne, W. V. S., 610
Truesdale, W. H., 325

Vanderhoeym, Eugene, 576

Walitt, A. M., 127
Walker, H. E. D., 700
Wilgus, W. J., 474
Willis, R. W., 478
Wilson, C. C., 117
Wilson, E. B., 175
Wynkoop, H. S., 703

Yoakum, B. F., 294
Yorke, Lt. Col. H. A., 279, 601

GENERAL INDEX

[Illustrated articles are indicated thus*; Editorials thus†; Contributions thus‡.]

A

Accidents:

- B. & O., Terra Cotta, 173†, 177
- Belgian St. R. R.'s, Switch, 719†, 745
- Colo. & Sou., near Marshall, 194*
- Derailment by Wind, 194*
- Discipline and, 48†
- Explosives, Bureau of, 495†, 508
- Government Bulletins: No. 25, 182; No. 26, 696
- Hauling Locomotive Up Mountain, 480*
- Indiana R. R. Commission Bulletins, 564†
- Int. Rap. Transit, Motorman Sentenced, 174†
- Int. Rap. Transit, Signalman Released, 719†
- London & North-Western, Shrewsbury, 601
- Melbourne, Australia, Collision, 586
- Mex. Ry., near Maltrata, 617
- Monthly Report, I. C. C., 323
- Monthly Summaries: Dec., 1907, 109†; Jan., 1908, 267†; Feb., 1908, 433†; Mar., 1908, 563†; Apr., 1908, 691†
- New York City, in January, 261
- Trespassers, 564†
- What are We Going to Do About Railroad Accidents? 144†, 266†, 270†, 336†, 467†, 597†, 598†

Accounting:

- Depreciation, 227, 681
- I. C. C. Supervision, 455
- M. of W. Committee Report, 400, 435
- Monthly Statement of Earnings to I. C. C., 131, 163
- Texas, 551
- Uniform Balance Sheet, 154

Acetylene (See Lighting)

Adams & Westlake Co., Axle Light Suit, 165

Adams, B. B., 52*

Africa:

- Benzuella R. R., 378
- Cape-to-Cairo R. R., 633
- Railroad Along Shire River, 667
- Railroad Construction, 158, 483
- Railroad from Red Sea to the Soudan, 220, 235†, 237†
- Stanleyville-Pontherville Line, 609

Air Brake (See Brake)

Albree Portable Compression Riveter, 229*

Alliance Elec. Cantilever Gantry Crane, 682*

Allis-Chalmers Co.:

Rolling Mill Engine, 197

Rock Crusher, 744*

American Blower Co.:

Heating and Ventilating Storage Battery Stations, N. Y. Cent., 489*

Ventilation of Int. Rap. Transit Subway, 587*

American Casting Co., Cast Iron Culvert Pipe, 101*

Am. Civic Assoc.:

Paper on Railroad Station Improvement, 185

Am. Express Co., Chicago & Alton Contract, 421

American-Hawaiian Line:

Steamship Texan, 377*

Traffic via Tehuantepec, 423

Am. Institute of Chemical Engineers, 651

Am. Institute of Elec. Engineers, Annual Dinner, 198

American Iron & Steel Institute, 489

American Line, Steamship New York, 321*

American Locomotive Co.:

Mollet Compound, Cent. of Brazil, 52*

Pacific Engine, N. Y. Cent., 468*

American Railway Association:

Car Surpluses and Shortages, 67, 150, 180,

250, 439, 506, 638, 646, 676, 730

Committee Reports, 599*, 600

Freight Car Efficiency, 646

Per Diem Commission, 323

Rail Sections, 49†

Spring Meeting, 599*

Am. Ry. Engineering and Maint. of Way Assoc.:

Committees, Personnel of, 335†

Committee Reports, 184, 400*

Committee Work for Next Year, 500

Convention, 184, 435

Convention Attendance, 478

Convention Exhibits, 445

Rail Committee, 548

Am. Soc. of Mech. Engineers:

Discussion on Coal, 562†

Editorial Manager, 421

Ames, Azel, Jr., 52*

Amsterdam Corporation, 713

Anderson Controlling Altitude Valve, 228*

Anglo-American Oil Co., Steamship Narragansett, 414*

Annual Reports (See also Corporation Names; also Accounting):

Summary of, 4†

What a Technical Journal Ought to Do, 141†

Arch (See Bridge)

Argentina:

Articles of Traffic, 260

Central Northern R. R., 483

Railroad Law, 549

Arica-La Paz Railroad, 195, 662

Armour Car Lines, Metal Draft Frame, 608*

Asbestos Protected Metal, 553*

Association (see names)

Assoc. of Licensed Cement Manufacturers, 163

Atchison Topeka & Santa Fe:

Artesian Wells, 585

Coaling Stations, Belen Cut-off, 346*

Freight Car Repair Shops at Topeka, 86*

Locomotives, Pacific and Consolidation, 453*

Offer to Buy Town, 228

Oil-Burning Locomotives Changed to Coal-

Burning, 67

Purchase of Oil Lands, 487

Atlanta, Birmingham & Atlantic, 618

Atlantic Coast Line:

Annual Report, 78†*

Atlantic Deeper Waterways Conference, Paper on

Cape Cod Canal, 726

Auditing (See Accounting)

Australia:

Railroads of, 689†

Austrian State Railroads:

Brotan Eight-Wheel Locomotive, 211*, 272†

Automatic Stops (See Safety Appliances)

Automobile Dynamometer, 312*

B

Baggage (See Passenger Rates)

Baker, I. O., 715

Baker Street & Waterloo, 722*

Balance Sheet (See Accounting)

Baldwin Locomotive Works:

Consolidation and Pacific Engines, A. T. &

S. F., 453*

Mikado Locomotive, Ky. & Tenn., 731*

Smokebox Superheater, 453*

Ten-Wheeler, St. L. & S. F., 647*

Trucks for Richmond & Chesapeake Bay Cars,

637*

Baltimore & Ohio:

Alberton Cut-Off, 149*

Freight Yard, Brunswick, 516*

Rolling Lift Bridge at Cleveland, 380*

Terra Cotta Collision, 173†, 177

Barber & Co., Steamship Satsuma, 318*

Barney & Smith Car Co., Compartment Sleeping

Cars for N. Y. N. H. & H., 147*

Bascule (See Bridge)

Battery, Standard Storage, 552*

Belgian State Railroads:

Collision at Contich, 719†, 745

Earnings, 433†

Electrification, 230

Berg, W. G., 667*

Bethlehem Steel Co., 552

Beyer, Peacock & Co. Tank Locomotive, Great Cen-

tral, 662*

Bitumen-Emulsion Waterproofing, 384*

Blank & Russell, Flexible Metallic Semaphore

Blade, 260*

Block Signal (See Signal, Block)

Blue Print Forty Yards Long, 102*

Boiler (See Locomotive Boiler)

Bolster, Cast Steel, Cent. of N. J., 238*

Booth Line, Steamship Obidense, 451*

Boston & Albany:

Grade Separation at Worcester, 358*

Boston & Maine:

Grade Separation at Worcester, 358*

N. Y. N. H. & H. Merger, 77†, 424, 432†

N. Y. N. H. & H. Safety Appliances):

Cotton Brake-Shoes, London Tubes, 722

Hungarian Tests of Westinghouse, 158

Location of Brake-Shoes, 172†, 272†

Sliding Wheels, 172†, 272†

Brazil:

Rio Janelro-Goyaz Line, 642

Bridge:

Bascule, Strauss, Staten Island Rapid Transit

and St. L. I. M. & S., 385*

Blackwell's Island, 423, 635*

Brooklyn, Improved Car Service, 585

Brooklyn, Increasing Capacity of, 235†, 248*

Brooklyn, Inspection of, 521

Cantilever, Six Great, 635*

Decade of Design and Construction, 334†

Draw, N. Y. & Long Branch, Raritan River,

630*

Electric Motor for Draw Spans, 495†

Firth of Forth, 635*

Lift Bridge Foundations, L. S. & M. S., 324*

M. of W. Committee Report, 400, 435

Memphis, 635*

Monongahela, 635*

Nile, at Cairo, 713

Overgrade Highway Crossings, Concrete, Van-

dalla and M. K. & T., 704*

Overhead Crossing, Ill. Cent., Birmingham

Line, 366*

Quebec, 383, 397†, 407, 580*, 635*

Rolling Lift, Scherzer, Cleveland, 380*

Rolling Lift, Scherzer, Nile, 713

Rolling Lift, Scherzer, Some New, 488

Sangamon River, Wabash, 736*

Symmetrical Masonry Arches, 352*

Thebes, 635*

Bridge (Continued):

Track Elevation, Chicago Junction Ry., 243*

Trestle, Coal, D. L. & W., 640*

Trestles, Guatemala R. R., 475*

Trestle, Ill. Cent. Birmingham Line, 366*

Trestle, Nor. Pac., 356*

Trestle, Reinforced Concrete, C. B. & Q., 538*

Viaducts, Reinforced Concrete, Seville, Spain,

91*

Viaduct, Richmond & Chesapeake Bay, 637*

Viaduct, Shanghai-Nanking, 674*

Williamsburgh, Terminal, 713

British (See names of railroads)

British Thomson-Houston Co., Elec. Locomotives

for Metropolitan of London, 84*

Brotan Locomotive, 211*, 272†

Buda Gasolene Inspection Car, 521*

Buffalo, Rochester & Pittsburgh:

Coal Properties, 108†

Buildings, M. of W. Committee Report, 400, 435

Business Situation (See also Finance; also

Traffic):

Chicago Manufacturers on 1908 Outlook, 32

Conditions in 1884 and in 1907, 81†

Helping to Restore Confidence, 99

Newman on Railroad Situation, 455

Railroad Officers on 1908 Outlook, 14

Railroad Situation in the South, 44†, 651

Rea on, 649

Recovery from Panic; Forecasts, 75†

Steam and Trolley During Hard Times, 237†

C

Cab Signal (See Signal)

Canada, Railroads of, 123, 742*

Canadian Northern:

Western Canada and, 157

Canadian Pacific:

Rail Section and Specifications, 543*

Steamship Empress of Ireland, 290*

Canadian Railway Club:

Paper on Arrangement of Railroad Shops,

59*

Canal, Cape Cod, 726

Car:

Bolster (See Bolster)

Clearance, Third Rail, 599*

Coach, Penna. R. R., 455

Coach, Subway, 273*, 304*

Coal, Steel, Prussian St. R. R.'s, 603

Compartment, Sleeping, N. Y. N. H. & H.,

147*

Compartment, Victorian Railways, 98

Crane (See Hoisting and Conveying)

Depreciation (See Accounting)

Derrick (See Hoisting and Conveying)

Door (See Door)

Elec., Richmond & Chesapeake Bay, 637*

Elevator (See Hoisting and Conveying)

Exports in 1907, 229

Gasolene (See Motor Car)

Gondola, Self-Unloading, Hungary, 90

Heating (See Heating)

Heavy, England, 603

Heavy, Prussia, 711

Lighting (See Lighting)

Motor (See Motor Car)

Pay-as-You-Enter, Early, 520*

Pay-as-You-Enter, N. Y. City Ry., 585

Rail Motor (See Motor Car)

Raiser, 715*

Side Door, Subway, 273*, 304*

Sleeping, Compartment, N. Y. N. H. & H.,

147*

Sleeping, Far East, 520

Standards, Purchasing Department, 610

Steel and Wood, 127, 238*, 272†

Steel Car Design, 238*, 272†

Steel Coach, Penna. R. R., 455

Steel, Coal, Prussian St. R. R.'s, 603

Suburban, Victorian Railways, 98

Subway, 273*, 304*

Underframe, Metal Draft Frame and Center

Sill, 608*

Underframe, with Cast Steel Bolster, C. of

N. J., 238*

Vestibule Curtain Handle, 520*

Wheel (See Wheel)

Wrecking Crane (See Hoisting and Convey-

ing)

Car, Freight:

Hesse, Number in Service, 417

Prussia, Number in Service, 417

Prussian St. R. R.'s, Steel Coal, 603

Car, Passenger:

Hesse, Number in Service, 417

Int. Rap. Transit, Subway, 273*, 304*

N. Y. City Ry., Pay-as-You-Enter, 585

N. Y. N. H. & H., Compartment Sleeping, 147*

Penna. R. R., Steel Coach, 455

Prussia, Number in Service, 417

Richmond & Chesapeake Bay, Elec., 637*

Victorian Rys., Suburban, 98

Carline, Pressed Steel, 33*

Car Service (See also Inter-State Commerce Commission Rulings):

- Canada, 123
- Car Load Deliveries, 195, 323
- Car Loading and Unloading, Ohio, 551
- Car Shortage, Europe in 1906, 573
- Car Surpluses and Shortages, Am. Ry. Assn. Bulletins, 67, 150, 180, 250, 439, 506, 638, 646, 676, 730
- Commerce Regulation in Theory and in Practice, 272
- Demurrage and Track Service Charges in and near New York, 67, 99, 163
- Demurrage, Montana, 131
- Demurrage, Ohio, 487, 713
- Demurrage Penalty, Kansas, 259
- Demurrage Rules, Am. Ry. Assoc., 599
- Exchange Settlement, 697
- Freight Car Efficiency, 706
- Freight Car Efficiency, Am. Ry. Assoc., 646
- Individual Car Owners' Assoc., 681
- Penalty Laws in the South, 300†, 313
- Per Diem Agreement, Withdrawal of Maine Central, 33
- Per Diem Commission, Am. Ry. Assoc., 323
- Per Diem, N. Y. N. H. & H., 33, 291, 323
- Per Diem Reduction, 203†, 294
- Reciprocal Demurrage, Massachusetts, 421, 495†, 501
- Switching Charges, Chicago, 713
- Tank Cars for Oil, Failure to Supply, 163
- Car Shortage (See Car Service)
- Carnegie Steel Co., Rolling Mill Engine, 197
- Cattle (See Live Stock)
- Cedarcliff Stone Co., Elevating and Conveying System, 383*
- Cement (See Concrete)
- Cent. & Western Assoc. of Car Service Officers, Paper on Exchange Settlement for Cars, 697
- Central Electric Traffic Assoc., 259
- Central New England R. R. (See New York, New Haven & Hartford)
- Cent. of Georgia Ry., Acquisition by Harriman Interests, 397†
- Central R. R. of Brazil, Mallet Compound, 52*
- Central R. R. of New Jersey:
 - Cast Steel Underframe for Tender, Cast Steel Car End Sills and Cast Steel Bolster, 238*
- Central of Peru, 188*
- Cerro de Pasco, Peru, 188*
- Certified Pub. Accountants of N. J., Paper on Corporate Management vs. Government Control, 371
- Chandler Clutch Planer, 34*
- Changes in Railroad Ownership and Control, 1†
- Charing Cross, Euston & Hampstead, 722*
- Chemical Engineers, Am. Institute of, 651
- Chicago Subway (See Illinois Tunnel Co.)
- Chicago & Alton:
 - Eight Years' Development, 287
 - Express Contract, 421
 - Possible C. H. & D. Merger, 2†
 - Showing Tickets Before Entering Trains, 173†
- Chicago & Eastern Illinois:
 - Engineering Dept. Filing System, 648*
 - Oaklawn Shops, 61*
- Chicago & North-Western:
 - Menu in Japanese, 714*
 - Place Names, 617
- Chicago, Burlington & Quincy:
 - Bureau of Employment, 33
 - Galesburg Timber Preserving Plant, 54*
 - Reinforced Concrete Trestle, 538*
- Chicago Grain Door Co., Door Hook, 650*
- Chicago Great Western:
 - Oelwein Shops, 59*
- Chicago, Indiana & Southern, Annual Report, 506†*
- Chicago Junction Ry., Track Elevation, 243*
- Chicago, Milwaukee & St. Paul:
 - Bridge Derrick Car, 362*
 - Economy in Operation, 487
 - Private Telegraph and Express Companies, 649
- Chicago Pneumatic Tool Co.:
 - Chicago, Rock Island & Gulf, Improvements Ordered by Texas R. R. Commission, 150
- Chicago Steel Tape Co., Tape Repairers, 487
- Chile, Arica-La Paz Railroad, 195, 662
- China:
 - Canton-Hsingming Line, 733
 - Existing and Projected Railroads, 633
 - New Railroads, 548
 - Pekin Connected to Siberian R. R., 662
 - Pekin-Kalgan Line, 642
 - Shanghai-Nanking R. R., 674*
 - Soochow-Hangchow Line, 32
 - Third Class Travel, 165
 - Tientsin-Nankin Line, 573, 609
- Cincinnati & Muskingum Valley, Earnings and Two Cent Fares, 617
- Cinn., Hamilton & Dayton:
 - Ivorydale Shops, 61
 - Possible Merger with T. St. L. & W. and C. & A., 2†
- Claims:
 - How to Reduce, 720†
 - Law of Latent Defects, 301†
 - Long Island R. R., Fires, 649
 - N. Y. Cent. Wreck Verdict, 617
 - Penna. R. R., Thefts, 551
 - Prompt Payment, 431†, 455
- Cleveland Car Specialty Co., Pressed Steel Car-line, 33*
- Cleveland, Cincinnati, Chicago & St. Louis:
 - Beech Grove Shops, 61
- Clevis, Hillman Locked, 197*
- Coal (See also Fuel; also Freight Rates; also Interstate Commerce Law):
 - Anthracite Production, 423
 - Consumption per Mile, 272†
 - Control in Oklahoma, Utah and Wyoming, 617
 - Influence of Heat Value and Distribution on Fuel Cost, 49*, 299†
 - Mined in 1907, 99
 - Production, World, in 1906, 322

Coal (Continued):

- Storing Under Water, 203†, 561
- Use and Misuse, 562†
- Coaling Stations, Belen Cut-off, A. T. & S. F., 346*
- College (See names)
- Colorado & Southern:
 - Derailment of Train by Wind, 194*
 - Colorado River Break, 208†, 291
 - Complexities of Railroad Penalty, 266†
- Concrete (See also Concrete, Reinforced):
 - Cement Makers' Association, 163
 - White Portland Cement Tests, 520
- Concrete, Reinforced:
 - Bridge over Sangamon River, 736*
 - Coal Trestle, D. L. & W., 640*
 - Corrugated Round Reinforcing Bars, 586
 - Galesburg Timber Preserving Plant, C. B. & Q., 54*
 - Overgrade Highway Crossings, Vandalia and M. K. & T., 704*
 - Piles, 171†
 - Ties, 593†
 - Tie, Harrel, 693†*
 - Trestle, C. B. & Q., 538*
 - Viaducts and Docks at Seville, Spain, 91*
 - Viaduct, Richmond & Chesapeake Bay, 637*
- Consol. Ry. Elec. Lighting & Equip. Co., Axle Light Sult, 165
- Construction, New (See also Retrenchment):
 - Annual Construction Record, 332†, 389
 - B. & O., Alberton Cut-off, 149*
 - Florida East Coast Extension, 180*
 - Grand Trunk Pacific, 742*
 - Guatemala Railroad, 475*
 - Ill. Cent., Birmingham Line, 366*
 - Mountain Railroad Location, 663
 - Nor. Pac., Rebuilding in Minnesota, 356*
 - Outlook for 1908, 14
 - Russia in 1907, 518
 - Sou. Pac., Bay Shore Cut-off, 176*
 - Subsidies, Canada, 123
 - Track-Laying Machine, 382*
- Control (See Finance; also Government Control)
- Conventions (See names of associations)
- Conveying Machinery (See Hoisting & Conveying)
- Cook's Standard Tool Co., Climax Track Drill, 380*
- Cook System of Filing Tariffs, 293*
- Cooley, M. E., 52*
- Cooling (See Refrigeration; also Ventilation)
- Cost (See Business Situation)
- Coupler, Janney Radial, 132*
- Coupler, Height of, 691†, 725
- Coupling:
 - Flexible Insulated, 714*
 - Gold Combination Lock and Hose Support, 586*
 - Shaft, Hendershot, 165*
- Crane (See Hoisting and Conveying)
- Credit (See Finance)
- Creosote (See Timber)
- Crops (See Grain)
- Curve (See Maintenance of Way)

D

- Damages (see Claims)
- Davidson Car and Locomotive Raiser, 715*
- Delaware & Hudson:
 - Annual Report, 564†*
 - Coal Properties, 108†
- Delaware, Lackawanna & Western:
 - Annual Report, 567†*
 - Coal Properties, 108†
 - Concrete Coal Trestle and Ash Handling Plant, 640*
 - Interlocking at Hoboken, 150*
- Delayage (See Car Service)
- Demurrage (See Car Service)
- Denver & Rio Grande:
 - Coal Properties, 617
- Depreciation of Equipment (See Accounting)
- Derrick (See Hoisting and Conveying)
- Dickinson Smoke Jack, 384*
- Dictionary, Technolexicon, 572
- Differentials (See Freight Rates)
- Dike, Repairing, Southern Ry., 712*
- Discipline (See Employee)
- Dock, Reinforced Concrete, Seville, Spain, 91*
- Door, Grain, Automatic Carline Hook, 650*
- Downs, J. H., Steel Fence Posts, 713
- Draft Gear:
 - Line of Resistance, 271†*
 - Metal Draft Frame for Wooden Cars, 608*
- Draw Bar (See Safety Appliance Law)
- Drawbridge (See Bridge)
- Drill (See Machine Tools)
- Drinking (See Employee)
- Dynamite (See Explosives)

E

- Earnings (See also Annual Reports; also names of companies):
 - I. C. C. Preliminary Report, 445
 - July, 1907, to Jan., 1908, 456
 - March Railroad Earnings, 681
 - Monthly, I. C. C. Statement, 181, 163
 - Nine Western Roads, 219
 - Steam and Trolley During Hard Times, 237†
- Eastern of France, 573
- Education (See also names of schools, colleges and universities; also Telegraph):
 - Carnegie Research Scholarship, 132
 - College Graduates on the Pennsylvania, 291
 - Society for Promoting Industrial Education, 101
- Electric Exhibition at Marseilles, 197
- Electric Railways (See also Electrified Steam R. R.'s):
 - Boston to Chicago by Trolley, 295
 - English, 197
 - Interurban Rys. and Steam Roads, 130

Electric Railways (Continued):

- Massachusetts, Control by Other Companies, 657†
- Rates and Capitalization, Massachusetts, 691†
- Steam and Trolley During Hard Times, 237†
- Electric Traction (See also Locomotive, Electric):
 - Performance of Gas Engines and Electric Generators in Blizzard, 133
- Electrified Steam Railroads:
 - Belgium, 230
 - Giovi Tunnel, Italy, 680, 711
 - Long Island R. R., Extension Beyond Jamaica, 617
 - New York Central (See New York Central & Hudson River)
 - N. Y. N. H. & H. (See New York, New Haven & Hartford)
 - Prussian St. R. R.'s, 682
 - Recent Electrification, 463†, 473
 - Univ. of Mich. Lectures, 457
 - Western R. R. of France, 322
- Empire Club of Toronto, Address on Western Canada and Canadian Northern Railway, 157
- Employee (See also Education):
 - Apprentices, Motive Power, 196
 - Bonus, Pullman Co., 206†
 - Bureau of Employment, C. B. & Q., 33
 - Conductors, How to Get Better, 597†
 - Conductor Sentenced for Manslaughter, 99
 - Courtesy, Lackawanna Circular, 744
 - Delays to Trains, Enlightening Passengers, 171†, 175†
 - Discipline:
 - Accidents and, 48†, 266†, 270†, 336†, 467†, 597†, 598†
 - Can. Pac., Demerits, 487
 - Surprise Tests, Lehigh Valley, 295
 - Employers' Liability Bill, New, 552, 617
 - Employers' Liability Law Overthrown, 43†
 - Enginemmen, How to Get Better, 597†
 - Enginemmen, Training Prussian St. R. R.'s, 629
 - First Aid, Penna. R. R., 551
 - Hours of Labor Laws:
 - Federal, Telegraphers and Signalmen, 163, 195, 235†, 324, 551, 628†
 - Montana, 323
 - Trainmen, 16-Hour, 609, 617
 - Wisconsin, 131, 163, 259, 551
 - Immigrant Laborers in U. S., 95
 - Intoxicants, B. & O., 163
 - Intoxicants, Trainmen, 690†
 - Medals Awarded for Life Saving, 67, 651
 - Motorman Sentenced for Wreck on Int. Rap. Transit, 174†
 - Number in Service on U. S. Railroads, 519
 - Passenger as a Reform Agent, 497†
 - Passengers, Comfort of, and What Employees Can Do, 107†, 175†, 218
 - Pensions, Can. Pac., 551
 - Pensions, France, 250
 - Pensions, Grand Trunk, 29
 - Piece Work, 626†, 658†
 - Piece Work, Erie, 291, 323
 - Piece Work, N. Y. N. H. & H., 431†, 519
 - Politeness over Telephone, 165
 - Reduction of Time or Forces:
 - C. N. O. & T. P., 421
 - Effect on Unions, 172†
 - Nor. Pac., 323
 - Outlook for 1908, 14
 - Penna. R. R., 163, 294
 - Relief Fund, Penna. R. R., 551
 - Rewards for Good Conduct, Boston Elevated, 33
 - Signalman Released, Int. Rap. Transit Elevated Accident, 719†
 - Sleep, Lack of, 690†
 - Stationmen and Trainmen, Co-operation, 107†, 175†
 - Strike:
 - D. & R. G., 421
 - South America, 681
 - Surprise Tests, Harriman Lines, 617
 - Taking Chances, 690†
 - Trade Unions:
 - Boycott Injunction, 457
 - Discipline and, 48†, 266†, 270†, 336†, 467†
 - Effect of Reductions of Forces and Hours, 172†
 - Friendly, Postal Telegraph Co., 261
 - Motormen in Brotherhood of Locomotive Engineers, 743
 - Right to Discharge Union Man, 154
 - Supply and Demand in Labor Market, 67
 - Train Agents, Sou. Pac., 195
 - Train Auditors, St. L. & S. F., 713
 - Train Collectors, Southern Ry., 649
 - Wages:
 - Grand Trunk Telegraphers' Demands, 291
 - South America, 197
 - Southern Ry., 519
 - Supply and Demand, 67, 265†
 - U. S. Railroad Employees, 518
- Wage Increases:
 - Comparative Labor Costs, 1907 and 1906, 14
 - Grand Trunk, 99
- Wage Reductions:
 - Ala. Gt. Sou., Salaries, 259
 - B. & O., Salaries, 163
 - B. & M., 379
 - B. & M., Salaries, 259
 - C. N. O. & T. P., Salaries, 259
 - Enginemmen, 293
 - Erie, Freight Handlers, 379
 - Erie, Salaries, 33
 - Erie, Shop Laborers, 323
 - L. & N., Enginemmen and Trainmen, 323
 - L. & N., Salaries, 227
 - Georgia, 324
 - M. & O., Salaries, 227
 - N. Y. N. H. & H., Salaries, 323
 - Outlook for 1908, 14
 - Southern, Salaries, 99, 291
 - Trainmen, 293
- Employers' Liability Law (See Employee)
- Engine (See also Locomotive; also Turbine):
 - Gas, Horiz. Double-Acting, 602*
 - Rolling Mill, 197
- Engineering and Maint. of Way Assoc. (See Am. Ry. Eng. and Maint. of Way Assoc.)

GENERAL INDEX—Continued.

[Illustrated articles are indicated thus*; Editorials thus†; Contributions thus‡.]

- England (See names of railroads)
 Erie R. R.:
 Automatic Block Signals, 570*
 English View of, 553
 Rail Connection with Hudson & Manhattan, 323
 Saved from Receivership, 528†
 Scrip Dividends, 299†
 Terminal Improvements at Jersey City, 669*
 Eureka Tape Repairer, 487
 Ewald, F. G., 52*
 Expanded Metal and Corrugated Bar Co., Corrugated Round Bars, 586
 Explosives, Bureau of, 495†, 508
 Exports:
 Grain, Beef and Cotton in 1907, 131, 521
 Principal Ports in U. S., 261
 Express (See also names of companies; also Interstate Commerce Commission Rulings):
 Buying and Selling Express Commodities, 681
 Franks, 585
 History, 225
 Railroad Securities Held by Express Companies, 259
 Rates Reduced, Indiana, 487
 Rates Reduced, Nebraska, 455, 551
 Rates Reduced, Oklahoma, 519
- F**
- Fall River Line, Steamships Providence and Priscilla, 256*
 Fare (See Passenger Rates)
 Fast Trains and Runs (See also Schedule):
 Long Continuous Run of 1876, 507*
 Penna. R. R., Pittsburgh-Chicago, 648
 Federal Jurisdiction (See Government Rate Regulation; also Legal Decisions)
 Fence (See Post)
 Filing System, Engineering Dept., 648*
 Finance (See also Accounting):
 Bonds as Index of Conditions, 109†
 Capitalization, N. Y. Pub. Serv. Comm. Decision, 690†, 714
 Capitalization of American Railroads, 80†
 Changes in Railroad Ownership and Control, 1†, 29
 Conditions in 1884 and in 1907, 81†
 Control of Competing Lines, I. C. C. Annual Report, 56
 Dividend Changes in 1907, 8†
 Holding Companies, I. C. C. Annual Report, 56
 How Can Railroads Best Serve Public, 710
 Market for Bonds, 398†
 Massachusetts Stock Law, 643, 713
 Maturing Bonds and Notes in 1908, 585
 New Capital in 1907, 8†
 Refunding Maturing Obligations, 265†
 Refunding Short Term Notes, 139†
 Return on Railroad Capital, 80†
 Review of 1907, 2†
 Rifts in the Railroad Cloudland, 398†
 Secondary Street Ry. Financing, 691†
 Short Term Notes, 563†
 Stockholders' Protective Committees, 561†
 Stockholders, Increase, 714
 Valuation of Railroads, 56, 398†, 487
 Fire (See also Explosives):
 Acetylene Insurance Rules, 324
 Danger in Subways, 196
 Long Island R. R., Damages, 649
 Medal for Fire Detecting Device, 743
 Penna. R. R. in 1907, 291
 Town Burned on Nor. Pac., 585
 Firebox (See Locomotive Firebox)
 First Aid (See Employee)
 Flange (See Wheel)
 Florida East Coast, 180*
 Forney, M. N., 76†, 82*
 Fort Worth & Denver City Improvements Ordered by Texas R. R. Commission, 150
 Foundation (See Bridge)
 France, Results of Operation of Railroads in 1905 and 1906, 513
 Freight (See also Car Service):
 Bills of 1858, N. Y. Cent., 573*
 Claims (See Claims)
 Rates (See Freight Rates)
 Marking L. C. L. Shipments, 720†
 Freight House (See Station)
 Freight Rates (See also Interstate Commerce Commission Rulings):
 Coal, B. & O., 379
 Commerce Regulation in Theory and in Practice, 272
 Comparative, Various Countries, 80†
 Drayage Charges, St. Louis, 743
 Elkins Law and I. C. C. Law, 29
 Fines for Violation of Law, 163
 Fulton Bill Prohibiting Advance, 379
 Illegal, Central Vermont, 421
 Illegal, C. & O., 426
 Illegal, C. B. & Q., and C. & E. I., 99
 Illegal, C. St. P. M. & O., 743
 Illegal, Gt. Nor., 519
 Illegal, Mo. Pac. and St. L. I. M. & S., 551
 Illegal, St. L. & S. F., 421, 519
 Illegal, Sou. Pac., 259
 Joint, Electric and Steam Roads, 431†
 Interstate Rates Made by States, 527†, 530*
 Lower to Other Roads than to Shippers, Indiana, 259
 Steel Industry and Rebates, 699
 Tariff Filing, Cook System, 293*
 Uniform Classification, 551
- Freight Rates Increased (See also Interstate Commerce Commission Rulings):
 Atlantic Coastwise Steamships, 195
 Brown, W. C., on, 744
 Grain, Buffalo and New York, 551
 Mexico, 67, 198
 Milk and Butter, 585
 Movement for Higher Freight Rates, 593†, 625†
 Freight Rate Reduction (See also Interstate Commerce Commission Rulings):
 Arkansas, 537
 C. R. I. & P., 681
 Coal, C. B. & Q., 743
 Grain, St. Louis Eastbound, 323
 Illinois, 537
 Iowa, 532
 Kansas, 259, 421, 487, 536
 Kentucky, 519
 N. Y. Cent., 551
 N. Y. N. H. & H., 743
 Minnesota, 456, 537
 Missouri, 532
 Nebraska, 323, 487, 536
 St. L. & S. F., 681
 Texas, 537
 Wisconsin, 131
 Freight Traffic (See also Traffic):
 German and American, 76†
 Japan, 636
 Transportation on Great Lakes, 678
 Freight Yards (See Yards & Terminals)
 French, L. G., 421
 Fruit (See Refrigeration)
 Fuel (See also Coal):
 Free Transportation, 67
 Petroleum in Russia, 313, 733
 Pipe Line from Tulsa to Port Arthur, 227
 Funicular Railroad, Wetterhorn, Switzerland, 90
- G**
- Gas (See Engine)
 Gasoline Car (See Motor Car)
 Gates Rock Crusher, 744*
 General Electric Co.:
 Annual Report, 628†
 Equipment for Richmond & Chesapeake Bay, 637*
 Gasoline-Electric Car, 159*
 Switch Indicator, 28*
 General Managers' Assoc., Marking L. C. L. Shipments, 720†
 General Ry. Sig. Co.:
 Hudson & Manhattan Signals, 317
 Germany:
 Freight Traffic, 76†
 Gold Combination Lock and Hose Support, 586*
 Golden-Anderson Valve Specialty Co., Controlling Altitude Valve, 228*
 Goldschmidt Thermit Co., Thermit Welding, 505*
 Goss, Prof. W. F. M., 228
 Government Control, Corporate Management vs., 371, 721†
 Government Ownership:
 Cleveland Street Rys., 650
 Municipal, Compared with Corporate, 703
 Western of France, 221
 Government Rate Regulation (See also Freight Rates; also Interstate Commerce Commission Rulings):
 Commerce Regulation in Theory and in Practice, 272
 How Can Railroads Best Serve Public, 710
 Rate Law (See Interstate Commerce Law)
 Grade Separation (See also Bridge):
 Chicago Junction Ry., 243*
 M. of W. Committee Report, 400, 435
 Penna. R. R., 101
 Penna. Lines West, 195
 Worcester, Mass., 358*
 Grain (See also Freight Rates; also Interstate Commerce Commission Rulings):
 Advances on Bills of Lading, 519
 Canadian Lake Shipments, 261
 Crop Conditions, 714
 Elevator Changes, Un. Pac., 323
 Wheat Areas, 588
 Grand Rapids & Indiana, Results of Two Cent Fare, 527†
 Grand Trunk:
 Battle Creek Shops, 61
 Ottawa Union Station, 606*
 Pensions, 29
 Grand Trunk Pacific, 742*
 Great Britain (See names of railroads)
 Great Central (England):
 Consolidation with Great Northern, 75†, 195
 Tark Locomotive, 662*
 Great Northern (England), Consolidation with Great Central, 75†, 195
 Great Northern, Piccadilly & Brompton, 722*
 Great Western (England), Audible Distant Signal, 279
 Guatemala Railroad, 131, 475*
- H**
- Hamburg-American Packet Co., 222*
 Harbor, Depths of Principal, 311
 Harding, Prof. C. F., 260
 Harding, Russell, 371*
 Harriman Lines (See also separate companies):
 Government Action Against, 141†, 520
 Purchasing Department and Common Standards, 610
- Health Laws, Violation, Texas, 519
 Heating:
 Storage Battery Stations, N. Y. Cent., 489*
 Train, Elec. Divisions of Steam Roads, 374*
 Heine Compound Rail Section, 146†, 569†
 Hepburn Law (See Interstate Commerce Law)
 Hillman Locked Clevs., 197*
 History (See subjects and names of companies)
 Hoisting and Conveying:
 Car Elevator, Hudson & Manhattan, 184*
 Derrick Car, C. M. & St. P., 362*
 Electric Cantilever Gantry Crane, 682*
 Elevating and Conveying System, Cedarcliff Stone Co., 383*
 Hauling Locomotive Up Mountain, 480*
 Overhead Carrier between Warehouse and Dock, 100*
 Wrecking Crane, Shaw, 618*
 Holmen Water Softener, 554*
 Hook, Carline Grain Door, 650*
 Hose (See Pipe)
 Hostility (See Public, The, Railroads' Relations with)
 Hours of Labor Laws (See Employee)
 Hudson & Manhattan: 58, 246*, 268†, 399†, 473
 Car Elevator, 184*
 Rail Connection with Erie, 323
 Signaling, 317
 Hurley Track-Laying Machine, 382*
- I**
- Illinois Central:
 Birmingham Line, 366*
 Eight Years' Development, 287
 Hartford Stockholders, 561†
 Wrecking Crane, 618*
 Illinois Tunnel Co., 99, 455, 585, 713
 Immigrant Laborers in U. S., 95
 Immigration in 1907, 81
 Imports at Principal Ports in U. S., 261
 Independent Pneumatic Tool Co., Close-Quarter Drill, 618
 India (See also names of roads):
 Protecting Wet Cuts, Nagda-Muttra St. Ry., 676*
 Railroads of, 143†
 Indiana Railroad Commission, Accident Bulletins, 564†
 Individual Car Owners' Assoc., 681
 Injunction (See Legal Decisions)
 Inspection Car (See Motor Car)
 Institution of Civil Engineers:
 Description of Rail Section Tracing Machine, 700*
 Discussion on Great Western Audible Distant Signal, 279
 Paper on Train Resistances, 117
 Institution of Elec. Engineers, Paper on Raven Cab Signal, 214
 Interborough-Metropolitan Organization, 578*
 Interborough Rapid Transit Co.:
 Capacity of Subway, 737
 East River Extension, 58, 473, 617, 625†
 Improved Service in Subway, 33
 Proposed Block Signals on Local Tracks, 260
 Signal Improvements, 397†, 406
 Signaling in East River Tunnels, 283*
 Subway Car, 273*, 304*
 Subway Ventilation, 587*
 Interchange (See Car Service)
 Interlocking (See Signals, Interlocking)
 International & Great Northern, Improvements Ordered by Texas R. R. Commission, 150, 323, 519
 Interstate Commerce Commission (See also Interstate Commerce Law; also Accounting; also Freight Rates):
 Accident Bulletins: No. 25, 182; No. 26, 696
 Accident Reports, Monthly, 323
 Annual Report, 56, 177
 Block Signal and Train Control Board, 52*
 Block Signal Mileage, 527†, 543
 Cotton Compression Investigation, 163
 Form of Freight Tariffs, 99, 745
 Railroad Earnings, 445
 Right to Fix Rates, 259
 Work of, in Rulings, 527†
 Work Under New Law, 14, 45†, 649
 Interstate Commerce Commission Rulings (For titles of cases, see p. x):
 Administrative, Miscellaneous, 35
 Agricultural Machinery, 262
 Baltic Pool, 458
 Brushes, Classification, 230
 Cameras, Rates, 489
 Carload Rates, Mineral Water and Beer, 68
 Car Shortage, 683
 Car Shortage, Discrimination, 425
 Cattle Rate to Chicago, 682
 Class Rates to Pecos, Tex., 425
 Coal, Cannel and Bituminous, 619
 Coal Car Distribution and Carriers' Coal, 619
 Coal, Clinch Valley and Pocahontas, 458
 Coal Rate Upheld, 555
 Coal Rates, Wyoming to Nebraska, 555
 Coke Oven Basis of Car Supply, 166
 Coke Rate, 457
 Commodity Clause Penalties, 519
 Competitive Rate Adjustment, 556
 Corn Rate, 134, 457
 Cotton Compression Points, 426
 Demurrage on Private Cars, 588
 Differentials to Wichita, 619
 Division of Traffic, New and Old Roads, 34
 Excursion Rates, 682
 Express Rates, Denver and Missouri River, 620

Interstate Commerce (Continued):

- Fish, Low Rate because of Irregularities, 683
 Freight Billing, 230
 Freight Bureau Can Bring Complaint, 230
 Fruit Jars, Reparation, 555
 Grain Differentials, 230
 Grain Rates, Buffalo to New York and New England, 134
 Intra-State Private Cars, 425
 Intra-State Rate and Interstate Movement, 555
 Iron Ore Rate, 588
 Iron Pyrites, Reparation, 555
 Jobbing Territory, No Permanent Lien, 556
 Joint and Combination Rates, 425
 Joint Rate with Electric Railway, 458
 Live Stock, Southwest to Chicago, 619
 Loading Cars to Marked Capacity, 588
 Long and Short Haul, 134
 Lumber Charges, 682
 Manure, Washington to Glenndale, 682
 Marine Insurance, 457
 Masurite Classification, 588
 Milk and Cream Rates, 261
 Misrouting, Reparation, 425
 Motorcycles, Rate, 489
 Multigraphs, Classification, 555
 New Suit Necessary for Lower Rate, 457
 Obscure Rates, 556
 Oklahoma, Commission's Authority in, 458, 555, 619
 Passenger Rates, Special, 555
 Passenger Service, 261
 Plate Glass Import Rules, 198
 Poor Location and Lower Rates, 457
 Railroad Papers to be Preserved, 69
 Rate Fabric Upheld, 134
 Reduced Rates Ordered for Fixed Period, 34
 Refrigeration, Oranges, 683
 Relation of One Rate to Rate System, 715
 Reparation, Low Rate Suspended, 425
 Reparation; Rates Should be First Paid, 425
 Secret Rates, Value of Testimony, 651
 Shippers Held to Agreement, 424
 Shippers' Instructions, Rate by Another Route, 555
 Specially Built Roads, Higher Rates, 425
 Station Facilities, 262
 Station, Re-establishment, 230
 Statute of Limitations, 619
 Steamship Line, No Authority Over, 555
 Stockholders' Rights, 262
 Storage, Inland Shipments at Lake Ports, 556
 Switching Charges, 682
 Tariff Regulations, 522
 Through Route and Joint Rate, 424, 457, 619, 620
 Walnut Lumber, Export Rate, 134
 Wire Coat Hooks, Classification, 230
 Work of Commission, 527†
 Interstate Commerce Law (See also Freight Rates):
 Commodity Clause, 108†, 487, 585, 617, 657†, 743
 Work of Commission under New Law, 14, 45†, 649
 Interurban Lines (See Electric Railway)
 Intoxicants (See also Employee):
 Sale in Iowa, C. B. & Q., 33
 Sale on Pullman Cars, 324
 Iowa Ry. Club:
 Paper on Track and Ballast, 363
 Paper on Relations Between Interurban Railways and Steam R. R., 130
 Iron & Steel (See also Rail; also Wheel; also Am. Iron & Steel Institute):
 Pig Production in 1907, 226, 292
 Rebates and the Steel Industry, 699
 Steel Prices, 552
 Tool Steel, Special Shape, 572*
 Irrigation, Artesian Wells, A. T. & S. F., 585
 Italian State Railroads:
 Handling Traffic, 218
 Results of Government Management, 32

J

- Jack, Davidson Car and Locomotive Raiser, 715*
 Janney Radial Coupler, 132*
 Japanese Menu Card, 714*
 Japp, Henry, 473*
 Jeffrey Manufacturing Co.:
 Elevating and Conveying System, 383*
 Overhead Carrier between Warehouse and Dock, 100*
 Johnson, A. H., 261

K

- Kentucky & Tennessee, Mikado Locomotive, 731*
 Kinsman Block System Co., Automatic Stops, 283*, 317
 Kirkwood Heater, 374*
 Koch, Theodore F., & Co., Bitumen-Emulsion Waterproofing, 384*
 Koppel, Arthur, 715.

L

- Labor (See Employee)
 Lake Shore & Michigan Southern:
 Lift Bridge Foundations, 324*
 Track Tanks, 332†, 337*
 Lamp (See Signal; also Lighting)
 Lamport & Holt Line, Steamship Verdi, 449*
 Lancashire & Yorkshire Steam Jackets and Superheaters, 689†
 Land Grant, Oregon & California R. R., 421
 Landis Staybolt Cutter, 164*
 Legal Decisions (See also Interstate Commerce Commission Rulings; also Legislation):
 Alabama Law, Injunction, 487
 Courts Succeed Legislatures, 107†
 Elkins Law, Validity of, 291, 421
 Employers' Liability Law Overthrown, 43†

Legal Decisions (Continued):

- I. C. C. Right to Fix Rates, 259
 Latent Defects, 301†
 Massachusetts Elec. Rys., Control by Other Companies, 657†
 Minnesota Law Unconstitutional, 456
 Missouri Law on Removing Cases from State to Federal Courts, 107†, 131
 North Carolina Law Unconstitutional, 456
 Package Storage Charges, 131
 Pennsylvania Two-Cent Fare Law Void, 107†, 112
 Rates on Live Stock and Live Stock Products, 487
 Right to Discharge Union Man, 154
 Safety Appliance Law, Strict Construction, 691†, 725
 State and Federal Courts, 107†
 Supreme Court, I. C. C. Annual Report, 177
 Tank Cars for Oil, Failure to Supply, 163
 Tipping System, 261
 Legislation (See also Government Rate Regulation; also Passenger Rate Reduction; also Freight Rates; also Freight Rate Reduction; also Employee; also Car Service):
 Alabama, 313
 Argentine, 549
 Courts Succeed Legislatures, 107†
 Defects in Corporation Laws, 521
 Effect on Earnings and Outlook for 1908, 14
 Effect on Recovery from Panic, 204†, 300†
 Employers' Liability Bill, New, 552, 617
 Florida, 314
 Georgia, 314
 Hours of Labor (See Employee)
 Live Stock Transportation, 649, 681
 Massachusetts Stock Law, 643, 713
 Mississippi, 260
 N. Y. N. H. & H.—B. & M. Merger, 77†, 424, 432†
 New York, Rapid Transit Construction, 743
 North Carolina, 314
 Patents in Great Britain, 148
 Penalty Laws in the South, 300†, 313
 Railroad Situation in the South, 44†
 Rate Law (See Interstate Commerce Law)
 Sherman Law, 141†, 455
 South Carolina, 314
 Texas, Effects, 294
 Virginia, 314
 Wisconsin, Issue of Securities, 520
 Lehigh & Hudson River Bonds, 690†, 714
 Lehigh Valley:
 Black Diamond Express, 195, 743
 Lighting:
 Acetylene Insurance Rules, 324
 Axle Light Suit, 165
 Berth Lights, 636
 Milburn Acetylene, 133*
 Pintsch Mantel Lamp, 196*
 Live Stock Transportation, 649, 681
 Loading (See Car Service)
 Location (See Construction, New)
 Locomotive:

- American (See Locomotive, Eight-Wheel)
 Atlantic, Penna. R. R., 507*
 Atlantic, State Railroads of Sweden, 280*
 Brotan, 211*, 272†
 Clearance, Third Rail, 599*
 Comp. Mallet, Cent. of Brazil, 52*
 Consolidation, A. T. & S. F., 453*
 Crane (See Hoisting and Conveying)
 Cylinder (See Locomotive Cylinder)
 Eight-Wheel, Aust. St. Railroads, 211*
 Exports, U. S., 229, 552
 Exported from Hanover, Germany, 554
 Frame (See Locomotive Frame)
 Hauling Up Mountain, 480*
 Hesse, Number in Service, 417
 Mallet Comp., Cent. of Brazil, 52*
 Mikado, Ky. & Tenn., 731*
 Oil Burning, A. T. & S. F., 67
 Pacific, A. T. & S. F., 453*
 Pacific, N. Y. Cent., 468*
 Piston Valve (See Locomotive Cylinder)
 Prussia, Number in Service, 417
 Raiser, 715*
 Single Driver, London & N.-W., 548*
 Sled, 220*
 Standards, Purchasing Department, 610
 Superheater (See Superheater)
 Switching, Great Central, 662*
 Tank, Great Central, 662*
 Tank, Prussian St. Railroads, 512*
 Tender (See Locomotive Tender)
 Ten Coupled Tank, Prussian St. R. R.'s, 512*
 Ten-Wheel, St. L. & S. F., 647*
 Types and Weights in U. S., 499†
 Valve (See Valve; also Locomotive Cylinder)

Locomotive, Electric:

- Metropolitan of London, 84*
 Spokane & Inland, 474
 Storage Battery, Motor Truck, 100*, 744*
 Tractive Effort, N. Y. C., 229*
 Wireless Control of Motor Truck, 744*

Locomotive, Freight:

- A. T. & S. F., Consolidation, 453*
 Cent. of Brazil, Mallet Comp., 52*
 Great Central, Tank Switching, 662*
 Mikado, Ky. & Tenn., 731*
 Prussian St. Railroads, Tank, 512*
 Locomotive, Passenger:
 A. T. & S. F., Pacific, 453*
 Austrian St. R. R.'s, Eight-Wheel, 211*, 272†
 London & N.-W., Single Driver, 548*
 N. Y. Cent., Pacific, 468*
 St. L. & S. F., Ten-Wheel, 647*
 Swedish State Railroads, Atlantic, 280*

Locomotive Boiler:

- Brotan, 211*, 272†
 Steel Spelerized Tubes, 681

Locomotive Cylinder:

- Boring Multiple Cylinders, 286*
 Repairing Cracked Piston Valve Cylinders, 283*
 Steam Jackets and Superheaters, 689†

Locomotive Firebox:

- Brotan, 211*, 272†

Locomotive Frame:

- Facing Pedestal Legs, 488*
 Thermit Welding, 505*
 Locomotive Performance (See also Fast Trains and Runs):
 Coal Consumption per Mile, 272†
 High Steam Pressures, 464†*
 Italian Unit of, 530
 N. Y. C. Elec. Locomotives, 229*
 Locomotive Tender, Cast Steel Underframe, 238*
 London & North-Western:
 Locomotive, Lady of the Lake, 548*
 Shrewsbury Derailment, 601
 Steamship Scotia, 290*
 London Underground Electric Rys., 722*
 Long Island Railroad:
 Electrification Beyond Jamaica, 617
 Passenger/Traffic, 291
 Lumber (See Timber)

M

- McConway & Torley Co., Janney Radial Coupler, 132*
 McLaughlin Car Elevator, 184*
 Machinery Club of New York, 101
 Machine Tools:
 Boring Multiple Cylinders, 286*
 Car Wheel Boring Mill, 586*
 Drill, Climax Track, 380*
 Drill, Thor Pneumatic, 618
 Facing Pedestal Legs of Locomotive Frames, 488*
 Lathe, Portable Motor-Driven, 164*
 Pipe Bending Machine, Pneumatic, 67*
 Planer, Chandler Clutch, 34*
 Planer, Niles-Bement-Pond, 68*
 Riveter, Portable Compression, 229*
 Special Shape Tool Steel, 572*
 Staybolt Cutter, 164*
 Mail:
 Fines for Delays, 487
 Short Line Railroad Assoc., 423
 Maintenance of Way (See also Rail):
 Ballast, M. of W. Committee Report, 400*, 435
 Curve and Switch Tables, 175†
 Curve Superelevation, 372*
 Filing System, 648*
 Improvements Ordered by Texas R. R. Commission, 150
 Keeping Permanent Way Maintenance Down, 333†
 Outlook for 1908 Expenses, 14
 Protecting Wet Cuts in India, 676*
 Relining Long Curves, 478
 Snow Fences, 636, 694†
 Standards, Purchasing Department, 610
 Track and Ballast, 363, 432†
 Track Gang Efficiency, 139†
 Track, M. of W. Committee Report, 400*, 435
 Track Stresses on Curves, 279

Maintenance of Way Association (See Am. Ry.

Engineering and Maint. of Way Assoc.)

Manila, Railroad Connection with Cavite, 651

Manning, Maxwell & Moore, Hendershot Shaft

Coupling, 165*

Masonry (See Bridge, also Concrete, Reinforced)

Massachusetts Railroad Commission:

Annual Report, 58

Metal Ties Co., Cast Steel Tie, 385*

Metropolitan Ry. of London, Electric Locomotive,

84*

Metropolitan Ry. (Paris), St. Michael Station,

642*

Metropolitan Street Ry., 488

Mexican Central Organization, 667

Mexican Ry., Collision near Maltrata, 617

Midl R. R., 573

Milburn Acetylene Light, 133*

Mileage Ticket (See Passenger Rate Reduction)

Milliken Bros., Galvanized Steel Poles for Trans-

mission Lines, 386*

Mine (See Coal)

Missouri Kansas & Texas:

Kansas City Terminals, 550*

Order to Buy Equipment Suspended, 649

Reinforced Concrete Overgrade Highway

Crossings, 704*

Moir, E. N., 473*

Motor (See also Locomotive, Electric; also Car):

Electric, for Draw Spans, 495†

Mill, Westinghouse, 650

Motor Car (See also Automobile):

C. & N. W., 617

Gasolene-Electric, Gen. Elec. Co., 159*

Gasolene Electric, Strang, 731*

Gasolene, Nantucket Central, 102

Ill. Cent., 379

Inspection, Buda, 521*

Inspection, Stover, 292*

Russia, 227

Municipal Ownership (See Government Owner-

ship.)

Municipal Traction Co., Cleveland, 650

N

Nantucket Central, 102

National Assoc. of Traveling Engineers, Address

before, 63

National Transcontinental (See Grand Trunk Pa-

cific)

New England Nav. Co., New Terminals at New

York, 488

New England Railroad Club, Paper on the Trials

of a Master Mechanic, 113

Newfoundland, Railroads of, 315*

New Jersey State Railroad Commission, 67

New Metal Tool Steel Co., Special Shape Tool

Steel, 572*

New York & Long Branch, Raritan River Bridge,

630*

N. Y. & Long Island R. R., Belmont Tunnel, 424,

473

N. Y. & Providence S. S. Co., 292

GENERAL INDEX—Continued.

[Illustrated articles are indicated thus*; Editorials thus†; Contributions thus‡.]

- New York Central & Hudson River:
Annual Report, 692†
Elec. Locomotives, Tractive Effort, 229*
Electrification Results, 474
Eleventh Avenue Freight Tracks, 229
Getting Seated in the Train, 107†, 175†
Heating and Ventilating Storage Battery Stations, 489*
Interlocking at Batavia, 733*
Pacific Locomotive, 468*
Train Heating on Elec. Division, 374*
- New York City (See New York Public Service Commission)
- New York City Ry.:
Conditions, 488
Increased Service, 585
Pay-as-You-Enter Cars, 585
- New York Machinery Club, 101
- New York, New Haven & Hartford:
Abandonment of Line of Cent. N. E., 519, 551
A. C. Automatic Block Signals, 95*
Attleboro Passenger Station, 216*
Boston & Maine Merger, 77†, 424, 432†
Compartment Sleeping Cars, 147*
Electrification, 474, 585
Government Suit, 720†
Grade Separation at Worcester, 358*
Massachusetts Trolleys, 657†
Per Diem: I. C. C. Appealed to by Connecting Roads, 33
Piece Work, 431†
Steamships Providence and Priscilla, 256*
Train Heating on Elec. Division, 374*
Two Cents a Mile, 140†
- New York Public Service Commission:
Annual Report, 132
Capitalization, Lehigh & Hudson River, 690†, 714
Eleventh Avenue Freight Tracks, N. Y. C., 229
Jurisdiction, Bill to Enlarge, 455
N. Y. City Accidents, 261
Orders to Roads in New York City, 33
Scrip Dividends, 299†
Subway Capacity, 737
Subway Car, 273*, 304*
Subway Signals, 397†, 406
- N. Y. Railroad Club (See also Railroad Club of New York):
Electric Night, 463†, 473
Paper on the Era of Steel and the Passing of Wood in Car Construction, 127
- New York R. R. Commission (See N. Y. Public Service Commission)
- New York Subway (See Interborough Rapid Transit)
- New York Traffic Club (See Traffic Club of N. Y.)
- Nichols, O. F., 186*
- Niles-Bement-Pond Co., Planer, 68*
- Nitro-Glycerine (See Explosives)
- North German Lloyd Earnings, 455
- Northern of France, 573
- Northern Pacific:
Payment for Burning of Town, 585
Rebuilding in Minnesota, 356*
- Norway, Railroad from Christiania to German Ocean, 711
- Nuttall Flexible Insulated Coupling, 714*
- Nydquist & Holm, Locomotive for State Railroads of Sweden, 280*
- O**
- Ocean Carrier, 43†, 63, 92, 125, 161, 192, 222*, 256*, 287*, 318*, 376*, 413*, 449*, 481, 514, 540, 581, 605, 638
- Officer (See also Organization; also Public, The, Railroads' Relations With; also Employee, Wage Reductions):
Important Changes in 1907, 25
Master Mechanic, Trials of, 113
Salaries, U. S. Railroads, 518
Traveling Engineer, 63
- Oil (See Fuel)
- Operating Expenses (See also Annual Reports; also Accounting):
Efforts to Check Increase, 14
- Oregon & California R. R. Land Grant, 421
- Oregon Railroad & Navigation (See also Harriman Lines):
Annual Report (U. P.), 12†, 37
- Oregon Short Line (See also Harriman Lines):
Annual Report (U. P.), 12†, 37
- Organization, Mex. Cent., 667
- Orleans R. R., 573
- Ownership (See Finance; also Government Ownership of Railroads)
- P**
- Pacific Engineering Co., Overhead Carrier between Warehouse and Dock, 100*
- Pacific Northwest Soc. of Engineers, Paper on Mountain Railroad Location, 662
- Paint:
Net Weight Packages, 131
Tests, 197
- Panama Railroad, Steamship Colon, 257*
- Paris, Lyons & Mediterranean, 573
- Paris, Metropolitan Subway, St. Michel Station, 642*
- Pass:
Express Employees, Texas, 713
France, 260
Shippers of Live Stock, Missouri, 195
- Passenger as a Reform Agent, 497†
- Passenger Rates (See also Interstate Commerce Commission Rulings; also Pass; also Passenger Rate Reduction):
Cash Fares, 681, 743
Clergy, Penna. R. R. and P. & R., 33
Comparative, Various Countries, 80†
Limited Trains, Between Non-Stop Stations, 195
New York, 133
Penna. R. R., 164
Second Class Fares Abolished, Transcontinental Passenger Assoc., 649
Street Railway Fares, 261
Summer Tourist, 259
Taxation of Tickets in Germany, 258
Ticket Brokers, Colorado, 163
Transatlantic, 227
Transfers, N. Y. City Ry., 617
- Passenger Rate Increases:
Brown, W. C., on, 744
Colonist to West, 259
Long Island R. R., 551
Massachusetts Electric Railways, 691†
West Jersey & Sea Shore, 649
- Passenger Rate Reduction (See also Interstate Commerce Commission Rulings):
Alabama, 131
A. T. & S. F., Tourist, 455
Baggage, 421
Canada, 123
Can. Pac., Party Rates, 455
C. B. & Q., Summer Excursion, 379
Convention Rates, Central Passenger Assoc., 649
Georgia, 58, 99, 131
Harriman Lines, Tourist, 455
Illinois, 487, 519
Italy, 518
Kansas, 133
Louisiana, 259
Mileage Books to Be Presented at Ticket Offices, 713
Minnesota, 259, 456
Mississippi, 131, 133, 227, 260, 291, 324, 421, 649
Missouri, 487, 519
M. K. & T. Mileage Books, 227
New York, 227
New York, Coney Island, 743
New York, School Children, 487
N. Y. N. H. & H., 140†
North Carolina, 131, 195, 227
North Dakota, 259
Oklahoma, 227, 259, 291, 487
Pennsylvania, 107†, 112
Results of, 527†, 617
Russia, 518
Seaboard Air Line, 681
Seaboard Air Line, Party Rates, 323
South Carolina, 58, 131
Street Railway, Three-Cent, Cleveland, 650
Tennessee, 131, 163, 487
Texas, 133, 227
Un. Pac., 259
Wisconsin, 455
- Passenger Traffic (See also Traffic):
Great Lakes, 456
Interurban Rys. and Steam Roads, 130
Japan, 636
N. Y. N. H. & H., Results of Two-Cent Fare, 140†
- Patents, Law Affecting, in Great Britain, 148
- Pay (See Employee)
- Pearson, S., & Son, Penna. R. R. East River Tunnels, 470*
- Pearson, Sir W. D., 473*
- Pennsylvania Railroad:
Annual Report, 301†
Bergen Hill Tunnels, 604*
Earnings, November, 1907, 131
East River Tunnels, 260, 379, 470*
Fires in 1907, 291
Freight Claims, 431†
Grade Separation, 101
Hauling Locomotive Up Mountain, 480*
In 1874 and in 1908, 554
Interlocking, New York Division, 163
Long Run of 1876 and Engine That Made It, 507*
Rail Order, 203†
Rail Specifications and Sections, 528†, 539*
Signals and New Tracks at Broad Street Station, 583*
Steel Coaches, 455
Stockholders, 229
Sunnyside Yards, 342*
Track Tank Trials, 466†
Traffic, Ten Years', 561†
- Pennsylvania Lines West (See also names of subsidiaries):
Grade Separation, 195
Water Softener, 554*
- Pennsylvania State R. R. Commission, 227
- Pension (See Employee)
- Per Diem (See Car Service)
- Perkins, C. E., 277
- Permanent Way (See Maintenance of Way)
- Peru:
Railroads of, 188*
- Peter Gray & Sons, Switch and Signal Lamps, 101*
- Philadelphia & Reading:
Coal Barge, 415*
Local Trains Discontinued, 131
Telegraph Block System, 228
- Philadelphia, Baltimore & Washington:
Washington Union Station, 163
- Philadelphia Traffic Club, 294
- Phoenix Manufacturing Co., Locomotive Sled, 220*
- Picked Up on the Road, 218, 279, 636, 729
- Piece Work (See Employee)
- Pier (See Dock)
- Pile:
Concrete, 171†
Pipe (See also Machine Tools):
Cast Iron Culvert, 101*
Pipe, Strength of Culvert, 626†
Gold Combination Lock and Hose Support, 586*
Oil, Tulsa to Port Arthur, 227
Pumping Sand for Fill, 550*
- Piston (See Locomotive Cylinder)
- Pittsburg Rys., Double-Flow Turbine, 728*
- Planer (See Machine Tools)
- Pneumatic Tools (See Machine Tools)
- Pole (See also Timber):
Galvanized Steel for Transmission Lines, 386*
- Post, Steel Fence, 713
- Postal Telegraph Co., Friendly Union, 261
- Pressed Steel Car Company:
Annual Report, 268†
Price (See Business Situation)
- Prosperity (See Business Situation)
- Prussian State Railroads:
Earnings, 186
Electrification, 682
Freight Tank Engine, 512*
Steel Coal Cars, 603
- Public Service, Nature of, 721†
- Public, The, Railroads' Relations With:
Complexities of Railroad Penalties, 266†
How Can Railroads Best Serve Public, 710
Petty Grievances, 175†, 218
Popular Feeling at End of 1907 and of 1906, 14
Truesdale on Situation, 325
- Puget Sound Bridge & Dredging Co., Steam Shovel Performance, 569†
- Purchasing Department and Common Standards, 610
- Q**
- Quebec & Lake St. John, Snow Plow, 506*
- R**
- Rail (See also Maintenance of Way):
Am. Ry. Assoc. Committee Report, 600.
Am. Ry. Assoc. Sections, 49†
Can. Pac. Section and Specifications, 543*
Economy of Better Rails at Higher Cost, 569†
Exports, 229, 521
Helm Compound Section, 146†, 569†*
M. of W. Committee Report, 400*, 435
M. of W. Committee, Work Assigned, 548
Old and Present; Composition and Number of Passes, 49†
Orders for 1908, 43†
Penn. R. R. Order, 203†
Penn. R. R. Sections and Specifications, 528†, 539*
Strength and Endurance of, 431†, 439*
Third Rail, Standard Location, 599*
Tracing Machine for Rail Section, 700*
- Railroads (See Public, The, R. R.'s Relations With)
- Railroad Age Gazette, 657†
- Railroad Club of New York, 713
- Railroad Commissions (See names)
- Railway Signal Association:
Committee on Automatic Stops and Cab Signals, 294
January Meeting, 90
May Meeting, 668
- Rate Law (See Interstate Commerce Law)
- Raven Cab Signal, 214, 251*
- Reading Company (See Philadelphia & Reading)
- Rebates (See Freight Rates, Illegal)
- Receiverships:
Erie Saved from, 528†
Seaboard Air Line, 44†, 46†*
- Reduction of Time or Forces (See Employee)
- Refrigeration:
Fruit Transportation, 629
Southern Pacific, 67
- "Regular" Line to Charleston, Steamship Quaker City, 377*
- Reid Newfoundland Co., 315*
- Reinforced Concrete (See Concrete, Reinforced)
- Reports, Annual (See Annual Reports; also names of companies)
- Re-Railer, Sargent, 379*
- Retaining Wall, Wet Cuts in India, 676*
- Retrenchment (See also Employee, Reduction of Time and Forces):
Outlook for 1908, 14
Public Sentiment and, 172†
- Review of 1907, 2†
- Revolute Machine Co., Long Blue Print, 102*
- Rich Marine Fire Detector, 743
- Richmond & Chesapeake Bay Ry., 637*
- Richmond, Fredericksburg & Potomac, Parallel Lines Allowed, 259
- Rifts in the Railroad Cloudland, 398†
- River (See Waterways)
- Riveter (See Machine Tools)
- Roadbed (See Maintenance of Way)
- Roberts & Schaefer Co., Coaling Stations on Belen Cut-Off, 346*
- Rock Crusher, 744*
- Rockwell-Wabash Co., Tariff Filing Cabinet, 293*
- Rolling Mill (See Rail; also Motor)
- Roofing, Asbestos Protected Metal, 553*

Roundhouse (See Yards & Terminals)
 Rules (See Employee; also Train Rules)
 Russia:
 Double Tracking Trans-Siberian, 572
 Rutland R. R., Annual Report, 596†

S

St. Louis & San Francisco:
 New Orleans Union Station, 734*
 Springfield Shops, 62
 Ten-Wheel Locomotive, 647*
 St. Louis Car Co.:
 Richmond & Chesapeake Bay Cars, 637*
 St. Louis, Iron Mountain & Southern:
 Bascule Bridge, 385*
 Safety Appliance (See also Brake):
 Automatic Stops, East River Tunnels, 283*
 Automatic Stops, Hudson & Manhattan, 317
 Cab Signal, Audible Distant, 279
 Cab Signal, German, 228
 Cab Signal, Raven, 214, 251*
 Exhibit, 521
 I. C. C. Annual Report, 177
 I. C. C. Block Signal and Train Control Board, 52*
 Safety Appliance Law:
 Height of Draw Bars, 691†, 725
 Prosecutions Under, 99, 195, 323, 487, 649
 Safety Car Heating & Lighting Co.:
 Pintch Mantel Lamp, 196*
 Salary (See Officer; also Employee, Wage Reductions)
 Salton Sea, 208†, 291
 Sarco Waterproofing, 379
 Sargent Re-Railer, 379*
 Schedule (See also Fast Trains and Runs):
 Fines for Junction Delays, Texas, 681
 Late Trains, 303†
 Late Trains, Texas, 259
 Posting Late Trains, Southern Ry., 259
 Twentieth Century Limited, 131, 519
 Schenectady, Development of, 521
 Scherzer Rolling Lift Bridge Co.:
 Bridge at Cleveland, 380*
 Nile Bridge, 713
 Some New Bridges, 488
 Schools (See names)
 Seaboard Air Line:
 Annual Report, 46†, 112†
 Receivership, 44†, 46†
 Seven Years' Results, 112†
 Sellers, Dr. Coleman, 89*
 Sellers, Wm., & Co.:
 Car Wheel Boring Mill, 586*
 Semaphore (See Signal)
 Shadow in the Railroad Forecast, 204†
 Shaft Coupling (See Coupling)
 Shanghai-Nanking R. R., 674*
 Shaw Wrecking Crane, 618*
 Sherman Williams Co., Helping to Restore Confidence, 99
 Ship (See also names of companies):
 Baltic Pool, 458
 Building in 1907, 219
 Harbors, Depth of Principal, 311
 Ocean Carrier, 43†, 63, 92, 125, 161, 192, 222*, 256*, 287*, 318*, 376*, 413*, 449*, 481, 514, 540, 581, 605, 638
 Passenger Traffic on Great Lakes, 456
 Sound Steamboat Line, New, 292
 Traffic via Tehuantepec, 423
 Transatlantic Passenger Rates, 227
 Transportation on Great Lakes, 678
 Tugboats in Straits of Magellan, 651
 Shipper (See Car Service)
 Shops:
 Arrangement of, 59*
 A. T. & S. F., Topeka Freight Car Repair, 86*
 C. & E. L., Oaklawn, 61*
 Chic. G. West., Oaklawn, 59*
 C. H. & D., Ivorydale, 61
 C. C. & St. L., Beech Grove, 61
 Grand Trunk, Battle Creek, 61
 Passenger Car Repair, 75†
 Portable Blacksmith, 690†
 St. L. & S. F., Springfield, 62
 Union Pacific, Omaha, 75†
 Short Line Railroad Assoc., 423
 Shovel (See Steam Shovel)
 Siberia (See Russia)
 Signal (See also Railway Sig. Assoc.):
 Cab, Audible Distant, 279
 Cab, German, 228
 Cab, Raven, 214, 251*
 Chimney-less Lamp, 101*
 Semaphore Blade, Flexible Metallic, 260*
 Signal, Block (See also Ry. Sig. Assoc.):
 A. C. Automatic, N. Y., N. H. & H., 95*
 Erie, 570*
 Harriman Lines, Mileage Equipped With, 33
 Hudson & Manhattan, 317
 Illuminated Track Indicator, East River Tunnels, 283*
 Indiana, 260
 Int. Rap. Transit, East River Tunnels, 283*
 Int. Rap. Transit, Proposed on Local Tracks, 260
 Int. Rap. Transit Subway Improvements, 397†, 406
 I. C. C. Annual Report, 177
 I. C. C. Block Signal and Train Control Board, 52*
 M. of W. Committee Report, 400, 435
 Mileage, I. C. C. Report, 527†, 543
 Permissive, Penna. R. R., 259
 Rail Circuits and Treated Ties, 331†, 434†
 Supervision of Train Despatcher, 668
 Telegraph, P. & R., 228
 Signal, Interlocking (See also Ry. Sig. Assoc.):
 Bolt Locking, 479
 D. L. & W., Hoboken, 150*
 Hudson & Manhattan, 317
 Int. Rap. Transit Subway Improvements, 397†, 406
 M. of W. Committee Report, 400, 435
 N. Y. C. & H. R., Batavia, 733*
 Penna. R. R. Broad Street Station, 584*
 Penna. R. R., New York Division, 163
 Signalman (See Employee)
 Sied, Locomotive, 220*
 Smoke Jack, Dickinson, 384*
 Snow Plow, Que. & Lake St. John, 506*
 Snow Fences, 636, 694†
 Society for Promoting Industrial Education, 101
 Soudan Railroad, 220, 235†, 237†
 South Manchuria Ry., 587
 Southern Pacific (See also Harriman Lines):
 Annual Report, 206†
 Bay Shore Cut-Off, 176*
 Colorado River Break, 208†, 291
 Freight Service Accelerated, 325
 Refrigeration and Orange Traffic, 67
 Side Track Capacity Increased, 67
 Steamship Momus, 257*
 Train Order Cabinet, 695*
 Southern Railway:
 New Orleans Union Station, 734*
 Repairing Dike at East St. Louis, 712*
 Spanish Cala Iron Co., Reinforced Concrete Viaducts and Docks, 91*
 Speed (See Fast Trains and Runs)
 Spokane & Inland Electric Locomotives, 474
 Sprague Electric Co.:
 Direct Current in Belgium, 230
 Standard Asphalt & Rubber Co., Waterproofing, 379
 Standard Elec. Accumulator Co., Storage Battery, 552*
 Standard Oil Steamship Capt. A. F. Lucas, 414*
 State Ownership (See Government Ownership)
 State R. R. Commissions (See names)
 Staten Island Rapid Transit, Bascule Bridge, 385*
 Station (See also Yards and Terminals):
 Chicago Junction Ry., Elevated, 243*
 Ill. Cent., Corinth, 370*
 Improvement, 185
 Indicator, 422*
 New Orleans Union, 734*
 N. Y. N. H. & H., Attleboro, 216*
 Offer to Buy Town, 228
 Ottawa Union Passenger, 606*
 Penna. R. R., Broad St., Improvements, 583*
 St. Michel, Paris Metropolitan, 642*
 Virginian Ry., 348*
 Washington Union, 163, 729
 Wis. Cent., Freight, Minneapolis, 698*
 Worcester Union Passenger, 358*
 Steam and Trolley During Hard Times, 237†
 Steam Shovel Performance, 569†, 597†
 Steamer (See Ships)
 Steel (See Iron and Steel; also Rail; also Wheel)
 Steel-Concrete (See Concrete, Reinforced)
 Stock (See Finance)
 Stover Motor Car, 292*
 Strang Gas-Electric Car, 731*
 Strauss Bascule Bridges, 385*
 Street Railways (See Electric Railways)
 Strike (See Employee)
 Subway (See also Tunnel; also names of companies):
 Chicago, 99, 455, 585, 713
 Fire Dangers, 196
 London, 722*
 New York (See Interborough Rapid Transit)
 New York, Need of New, 324
 St. Michel Station, Paris Metropolitan, 642*
 Super-elevation (See Maintenance of Way)
 Superheater:
 Baldwin Smokebox, 453*
 Schmidt, 512*
 Steam Jackets and, 689†
 Surprise Tests (See Employee)
 Surveying (See Construction, New; also Maintenance of Way)
 Swedish State R. R.'s Express Locomotive, 280*
 Switch (See also Signal, Interlocking):
 Chimney-less Lamp, 101*
 Curve and Switch Tables, 175†
 Indicator, Gen. Elec., 28*
 Repairs, Accident in Belgium, 719†, 745

T

Tanks, Track, 332†, 337*, 466†*
 Tape Repairer, 487
 Tate, Jones & Co., Heater, 374*
 Taxation (See also Legal Decisions):
 Alabama, 323
 New Jersey, 228
 Outlook for 1908, 14
 Texas, Effects, 294
 Tickets, Germany, 258
 Wisconsin, 323, 551
 Technical Journal, Aims of, 141†
 Technoleicon, 572
 Telegraph:
 Before Electric Telegraph Was Invented, 416
 School, N. Y. N. H. & H., 99
 School, Penna. R. R., 743
 Telegraph Operator (See Employee)
 Telephone:
 C. B. & Q., Train Wire, 195
 C. M. & St. P. for Train Despatching, 649
 L. S. & M. S., 551
 Tender (See Locomotive Tender)
 Texas & Pacific:
 Annual Report, 660†*
 Improvements Ordered by Texas R. R. Commission, 150, 323, 455
 Texas Railroad Commission:
 Improvements Ordered, 150, 323, 455, 519
 M. K. & T. Equipment Order Suspended, 649
 Orders Violated, 99
 Theft, Penna. R. R., 551
 Thermit Welding, 505*
 Third Rail (See Rail)
 Thor Air Drill, 618
 Ticket (See also Passenger Rates):
 Showing, Before Entering Train, 173†
 Tie (See also Timber):
 Cast Steel, 385*
 Harrel Reinforced Concrete, 693†*
 Metal, 417*, 447*, 484*
 Metal and Reinforced Concrete, 593†
 Treated, and Rail Circuits, 331†, 434†

Tie (Continued):

Value of Preservation, 44†
 York Cross-Rolled, 134
 Timber (See also Tie):
 Drain on the Forests, 710*
 Forest Preservation, 197
 Galesburg Preserving Plant, C. B. & Q., 54*
 Pole Consumption in 1906, 214
 Pulpwood Consumption in 1906, 282
 Reserve in British Columbia, 227
 Russia to Australia, 294
 Varieties Used in New Haven Compartment Cars, 147*
 Timetable (See Schedule)
 Tipping System, 261
 Tire (See Wheel)
 Toledo, St. Louis & Western:
 Possible C. H. & D. Merger, 2†
 Tool (See Machine Tool)
 Tool & Ry. Specialty Mfg. Co., Cylinder Boring Machine, 286*
 Toney & Buchanan, Interlocking Machine, 733*
 Tower, Galvanized Steel, for Transmission Lines, 386*
 Tracing Machine, Rail Section, 700*
 Track (See Maintenance of Way; also Construction, New)
 Track Elevation (See Grade Separation)
 Tractive Power (See Locomotive Performance)
 Trade Unions (See Employee)
 Traffic (See also Freight Traffic; also Passenger Traffic; also Business Situation):
 Central Electric Traffic Assoc., 259
 Chart of Growth and Facilities, 7†
 Traffic Club of New York, 165, 487
 Paper on Commerce Regulation in Theory and in Practice, 272
 Traffic Club of Philadelphia, 294
 Train:
 Station Indicator, 422*
 Transferring Passengers Between Moving Trains, 279
 Train Lighting (See Lighting)
 Train Load:
 Average; Yearly Comparisons, 7†
 Trainmen (See Employee)
 Train Order:
 Cabinet for, 695*
 Clearly Written, 730*
 Train Sheet for Heavy Division, 676
 Train Pipe (See Pipe)
 Train Resistance, 117
 Train Robberies:
 D. & R. G., 681
 Germany, 90
 Nor. Pac., 195, 421
 P. C. C. & St. L., 649
 Train Rules:
 Train Despatcher, Supervision of Block Signaling, Nor. Pac., 668
 Written Examinations, 562†, 628†
 Train Service (See Schedule; also Employee)
 Tramways (See Electric Railway)
 Transmission Line Crossings Over Railroads, 187
 Transmission Line Poles, 386*
 Trans-Siberian R. R., Double Tracking, 572
 Traveling Engineers (See National Assoc. of Traveling Engineers)
 Trespassing and Accidents, 564†
 Trestle (See Bridge)
 Trolley (See Electric Railway)
 Truck (See Locomotive, Electric)
 Tube (See Locomotive, Boiler; also Tunnel)
 Tunnel (See also Subway):
 Belmont (Steinway), 424, 473
 East River Extension, Interborough Rapid Transit, 58, 473, 617, 625†
 Erie, Bergen Hill, 669*
 Glovi, 680, 711
 Hudson & Manhattan (See Hudson & Manhattan)
 London Tubes, 722*
 Mont Cenis, 250
 Penna. R. R., Bergen Hill, 604*
 Penna. R. R., East River, 260, 379, 470*
 Simplon, 130, 250, 474
 Thames, 701*
 Turbine, Westinghouse Double-Flow, 728*
 Two Anomalies of a Railroad Situation, 172†
 Two Cents a Mile (See Passenger Rate Reduction)

U

Underground Electric of London, 81, 722*
 Underwood, H. B., & Co.:
 Facing Pedestal Legs of Locomotive Frames, 488*
 Pneumatic Pipe Bending Machine, 67*
 Union Pacific (See also Harriman Lines):
 Annual Report, 12†, 37
 Omaha Shops, 75†
 Union Switch & Signal Co.:
 A. C. Automatic Block Signals for N. Y. N. H. & H., 85*
 December Orders, 33
 D. L. & W. Interlocking Plant at Hoboken, 150*
 East River Tunnel Signals, 283*
 United Fruit Co., Steamship "Ellis," 413*
 United States Express Co. Chicago & Alton Contract, 421
 U. S. Metal and Manufacturing Co.:
 Car and Locomotive Raiser, 715*
 Hillman Locked Clevis, 197*
 United States Steel Corporation:
 Earnings, 165, 456
 Extra Dividend to Employees, 163
 Production Early in 1908, 261
 Steamship "J. Pierpont Morgan," 416*
 Stockholders, 379
 Universities (See names)
 University of California, Fellowships, 294
 University of Colorado, Engineering Shops, 651
 University of Michigan, Lectures on Electrification, 457
 University of Wisconsin, Railroad Library, 382

GENERAL INDEX—Continued.

[Illustrated articles are indicated thus*; Editorials thus†; Contributions thus‡.]

- V**
- Valuation (See Finance)
- Valve:
Anderson Controlling Altitude, 228*
Piston (See Locomotive Cylinder)
Walschaerts, Spelling of, 48†
- Vandalia:
Reinforced Concrete Over-Grade Highway Crossings, 704*
- Ventilation:
Int. Rap. Transit Subway, 587*
Storage Battery Stations, N. Y. Central, 489*
Viaduct (See Bridge)
- Victorian Railways:
Best Car for Suburban Traffic, 98
Collision near Melbourne, 586
- Virginian Ry.:
Station Standards and Terminals, 348*
- Vreeland, H. H., 166, 227
- W**
- Wabash:
Passenger Traffic, West Side Belt, 519
Sangamon River Bridge, 736*
- Wages (See Employee)
- Walschaerts Valve Gear, Spelling of, 48†
- Walsh, John R., 165
- Washington, Baltimore & Annapolis Elec. Ry., 572*
- Waterproofing:
Bridge, Bitumen-Emulsion, 384*
Bridge, Sarco, 379
- Water Service, M. of W. Committee Report, 400, 435
- Water Softener, Holmen, 554*
- Waterways, Inland, Improvement, 325, 498†
- Welding, Thermit, 505*
- Well, Artesian, A. T. & S. F., 585
- West Side Belt (See Wabash)
- Western of France:
Earnings, 573
Electrification of Suburban Lines, 322
Government Ownership Proposed, 221
- Western Railway Club:
Paper on the Car Wheel and its Relation to the Rail and Car, 118*
Paper on Freight Car Efficiency, 706
Paper on Influence of Heat Value and Distribution on R. R. Fuel Cost, 49*
- Western Society of Engineers, Paper on Strength of Culvert Pipes, 626†
- Western Union Telegraph, Texas, 487
- Westinghouse Air Brake Co.:
Tests of Quick-Action Brake in Hungary, 158
- Westinghouse Elec. & Mfg. Co.:
Mill Motor, 650
Portable Motor-Driven Lathe, 164*
Spokane & Inland Elec. Locomotives, 474
Storage Battery Motor Truck, 100*, 744*
- Westinghouse Machine Co.:
Double-Flow Turbine, 728*
Horiz. Double Acting Gas Engine, 602*
- Wharf (See Dock)
- Wheat (See Grain)
- Wheel:
Automatic Inspection of Car Wheels in Service, 499†
Car Wheel and its Relation to the Rail and Car, 118*, 204†
Chilled Iron vs. Steel, 175†, 204†, 336†
- Wheel (Continued):
Comparative Physical Tests of Car Wheels and Tires, 30*, 175†
Flat Spot Limit, 529†
Griffin Double Tread, 110†*
Microphotographs of Steel Wheels and Tires, 114*
Need of Better Car Wheels, 689†, 694†
Shelling Out of Steel Wheels and Tires, 155*
Sliding, 172†, 272†
Steel, Reason for, 496†
Tire Defects, Source of, 576*
White Star Line, Steamship Baltic, 319*
Williams & Wilson Co., Portable Lathe, 164*
Wilson Line, Steamship Idaho, 320*
Wire (See Transmission Line)
Wireless Control of Shop Truck, 744*
Wisconsin Central, Minneapolis Freight Station, 698*
- Wood (See Timber)
- Works (See Shops)
- Wrecking Crane (See Hoisting and Conveying)
- Y**
- Yards & Terminals:
B. & O., Freight Yard, Brunswick, 516*
Birmingham, Ala., 366*
Erie, Jersey City, 669*
Hump, M. of W. Committee Report, 400, 435
M. K. & T., Kansas City, 550*
New Orleans, 734*
Penn. R. R., Sunnyside, 342*
Virginian Ry., Roanoke and Norfolk, 348*
Williamsburgh Bridge, New York, 713
Wis. Cent., Minneapolis, 698*
York Cross-Rolled Steel Ties, 134

NEW PUBLICATIONS.

- Air-Brake Catechism, 303
- American Railway Association, Proceedings, 628
- Automatic Block Signals and Signal Circuits, 529
- The Blacksmith's Guide, 209
- Boiler Waters, 466
- Bond Offerings Indexed, 434
- Bulletins of the Engineering Experiment Station of the University of Illinois, 209
- Concrete, 661
- Course d'Economie Politique (Course in Political Economy), 174
- Cram's Standard American Railway System Atlas, 1908, 336
- Directory to the Iron and Steel Works of the United States, 661
- Earning Power of Railroads, The, 568
- Economics of Railway Operation, 143
- Einfluss der Armatur und der risse im Beton auf die Tragsicherheit, 174
- The Elements of Railroad Engineering, 434
- Electric Railways, 336
- The Engineering Index Annual for 1907, 597
- Experimental Electric Engineering, 597
- Graphical Handbook for Reinforced Concrete Design, 568
- History of State Regulation in New York, 568
- How to Burn Illinois Coal Without Smoke, 79
- Interborough Metropolitan Co., 568
- Intercompany Relationship of Railways in the United States, as of June 30, 1906, 497
- Locomotive Breakdowns, Emergencies and Their Remedies, 628
- Machine Shop Work, 269
- Manual of Recommended Practice of Railway Engineering and Maintenance of Way, 80
- The Men Who Sell Things, 303
- Practical Hydraulic Tables and Diagrams, 693
- Principles of Reinforced Concrete Construction, 269
- Proceedings of the Society for the Promotion of Engineering Education, 175
- Proceedings of the Traveling Engineers' Association, 269
- Report of the Proceedings of the Fifteenth Annual Convention of the International Railroad Master Blacksmiths' Association, 1907, 270
- Report of the United States Fuel Testing Plant at St. Louis, Mo., 661
- The Slide Rule, 269
- Specifications and Contracts, 209
- Standard Handbook for Electrical Engineers, 6
- Standard Examination Questions and Answers for Locomotive Firemen, 661
- Statistical Tables, 303
- The Strength of Chain Links, 569
- Subject Matter Index of Mining, Mechanical and Metallurgical Literature for the Year 1902, 270
- Table of Quantities for Preliminary Estimates, 303
- Tests of Reinforced Concrete Beams, 80

INTERSTATE COMMERCE COMMISSION RULINGS.

[See also General Index.]

- Amarillo Gas Co. vs. The Atchison, Topeka & Santa Fe et al, 457
- American Asphalt Assn. vs. Utah Railway, 425
- American Grocer Co. vs. Pittsburgh, Cincinnati, Chicago & St. Louis et al, 555
- Baer Bros. Mercantile Co., vs. Missouri Pacific and Denver & Rio Grande, 555
- Banner Milling Co. vs. New York Central & Hudson River, 134
- Bannon vs. Southern Express Co., 683
- T. H. Bunch Co., and Merchants Freight Bureau of Little Rock, Ark., vs. Chicago, Rock Island & Pacific and eight other railroads, 588
- Butlers Lumber Co. vs. Atlantic Coast Line et al, 682
- Cardiff Coal Company vs. Chicago, Milwaukee & St. Paul et al, 620
- Cardiff Coal Co. vs. North-Western et al, 619
- Cattle Raisers' Association of Texas vs. Missouri, Kansas & Texas and 57 other carriers, 619
- Cedar Rapids & Iowa City (Elec.) Railway vs. Chicago & North-Western, 458
- Chandler Cotton Oil Co. vs. Fort Smith & Western, 619
- Chicago & Milwaukee Electric Railroad vs. Illinois Central et al, 34
- Chickasaw Compress Co. vs. Gulf, Colorado & Santa Fe et al, and of the Pauls Valley Compress & Storage Co. vs. the same defendants, 426
- Commercial Club of Duluth, vs. Northern Pacific et al, 556
- Coomes & McGraw vs. Chicago, Milwaukee & St. Paul and Chicago, Rock Island & Pacific, 425
- Cosmopolitan Shipping Co. vs. Hamburg-American Packet Co., North-German Lloyd S. S. Co., Wilson (Hull) Lines and Scandinavian-American Line, 458
- Detroit Chemical Works vs. Northern Central et al, 555
- Eddleman et al vs. Midland Valley, 230
- Enid Ice & Fuel Co. vs. The Chicago, Rock Island & Pacific, 458
- Enid Ice & Fuel Co. vs. Fort Smith & Western, 455
- Fain & Stamps vs. Atlantic Coast Line and Central of Georgia, 683
- A. G. Field vs. Southern Railway et al, 555
- Forest City Bureau vs. The Atchison, Topeka & Santa Fe, 555
- Forest City Freight Bureau vs. The Ann Arbor R. R. 230(2)
- Frye & Bruhn et al vs. Northern Pacific and Chicago, Burlington & Quincy, 651
- F. J. Gentry vs. Atchison, Topeka & Santa Fe et al, 424
- Georgia Rough & Cut Stone Co. vs. Georgia Railroad et al, 588
- G. P. Gist vs. The Chicago, Rock Island & Pacific and the Choctaw, Oklahoma & Gulf, 458
- Goff-Kirby Coal Co. vs. Bessemer & Lake Erie, and Butts Cannel Coal Co. vs. same carrier, 619
- A. T. Haines, vs. Chicago, Rock Island & Pacific et al, 458
- Holcomb-Hayes Company vs. Illinois Central and Southern, 34
- D. B. Hussey vs. Chicago, Rock Island & Pacific, 555
- Hydraulic Press Brick Co. vs. St. Louis & San Francisco et al, 556
- W. B. Johnston vs. The Chicago, Rock Island & Pacific, 458
- Johnston & Larimer Dry Goods Co., and Cox-Blodgett Dry Goods Co. vs. The Atchison, Topeka & Santa Fe and 187 others, 619
- Geo. J. Kindel vs. Adams Express Co. et al, 620
- Kingfisher Mill & Elevator Co. vs. Chicago, Rock Island & Pacific, and the Choctaw, Oklahoma & Gulf, 453
- Koch Secret Service vs. Louisville & Nashville, 682
- Laning-Harris Coal & Grain Co. vs. Missouri Pacific & Wabash, 425
- Laning-Harris Coal & Grain Co., and Kansas City Hay Co. vs. St. Louis & San Francisco, 424
- Lansing-Harris Coal & Grain Co. vs. St. Joseph & Grand Island, 555
- Larsen Canning Co. vs. Chicago & North-Western et al, 555
- John H. Lewis et al vs. Chicago, Rock Island & Pacific, 262
- Lincoln Commercial Club vs. Chicago, Rock Island & Pacific et al, 556
- Lykes Steamship Line vs. Commercial Union and 13 railroads, 555

John B. Manning vs. Chicago & Alton R. R. and Louisiana & Missouri River R. R., 262
Masurite Explosive Co. vs. Pittsburgh & Lake Erie et al, 588
Merchants Freight Bureau of Little Rock, Ark., vs. Midland Valley and Chicago, Rock Island & Pacific, 457
Merchants' Traffic Association vs. The Atchison, Topeka & Santa Fe et al, 489
Merchants' Traffic Association vs. Pacific Express Co., 261
Merchants' Traffic Association of Denver, Colo., vs. New York, New Haven & Hartford and 17 other carriers, 457.
Milwaukee-Waukesha Brewing Co. vs. Chicago, Milwaukee & St. Paul et al, 68
The Minneapolis Threshing Machine Co. vs. Chicago, Rock Island & Pacific, 262
Missouri & Kansas Shippers' Association vs. Atchison, Topeka & Santa Fe, Missouri Pacific (two cases,) and Kansas City Belt, 619
Mortl vs. Chicago, Milwaukee & St. Paul, 682

Nebraska State Railway Commission vs. Union Pacific, 555
North Bros. vs. St. Louis & San Francisco, 425

Ocheltree Grain Co. vs. The Chicago, Rock Island & Pacific, 457

Ocheltree Grain Co. vs. St. Louis & San Francisco, 134

Pauls Valley Compress & Storage Co., vs. Gulf, Colorado & Santa Fe, 425
Pecos Mercantile Co. vs. The Atchison, Topeka & Santa Fe et al, 425
Pittsburgh Plate Glass Co. vs. Illinois Central, 198
Pittsburgh Plate Glass Co. vs. Pittsburgh, Cincinnati, Chicago & St. Louis et al, 198
Powhatan Coal & Coke Co. vs. Norfolk & Western and 56 coal operating companies in the Pocahontas district of West Virginia, 166

S. S. Quimby et al vs. Maine Central & Washington County Railways, 457

Railroad Commission of Kentucky vs. Louisville & Nashville et al, 556
Raven Red Ash Coal Co. vs. Norfolk & Western, 458
Reliance Textile & Dye Works vs. Southern Railway et al, 134
George R. Reynolds vs. Southern Express Co., 715
Romona Oolitic Stone Co. vs. Vandalia R.R., 230
Royal Coal & Coke Co., Tennessee Coal Co. and Minersville Coal Co. vs. Southern Railway, 619
Henry Ruttie et al vs. Pere Marquette, 425

Showalter & Co., vs. the Chicago, Rock Island & Pacific and the Choctaw, Oklahoma & Gulf, 458
Holles Stedman & Sons vs. Chicago & North-Western et al, 425

Thornton & Chester Milling Co. vs. Delaware, Lackawanna & Western et al, 134
Traer, Receiver of the Illinois Colliery Company vs. Chicago & Alton, 619
Traer, Receiver of the Illinois Colliery Company vs. Chicago, Peoria & St. Louis, 619
Traer, Receiver of the Illinois Colliery Co. vs. the Illinois Central, 619
Traffic Bureau of the Merchants' Exchange of St. Louis vs. Missouri Pacific & St. Louis, Iron-ton Mountain & Southern, 230

Wagner, Zagelmeyer & Co., vs. Detroit & Mackinac and Michigan Central, 425
Washburn-Crosby Co. of Buffalo vs. Erie et al, 134
Washburn-Crosby Co. vs. Lehigh Valley, 134
Washburn-Crosby Co. vs. Pennsylvania, 134
Wellington et al vs. St. Louis & San Francisco, 682
White Water Farms Co. v. Philadelphia, Baltimore & Washington, 682
Winters Metallic Paint Co. v. Atchison, Topeka & Santa Fe et al, 588
Wood River Grain Co. v. Union Pacific, 683 et al, 457
Wyman, Partridge & Co., et al vs. Boston & Maine

PERSONAL.

[Portraits are indicated thus*.]

Adams, B. B., 52*
Ames, Azel, Jr., 52*

Baker, I. O., 715
Brooks, William E., 459
Brown, H. H., 685
Burgess, George H., 686*
Bury, George J., 428*

Cameron, J. R., 427
Clausen, L. R., 653
Connor, George L., 491
Cooley, M. E., 52*

Dalrymple, J. E., 717*

Ewald, F. G., 52*
Elliot, Ralph Nelson, 327

French, L. G., 421

Goodell, G. A., 168*
Goss, W. F. M., 228

Hall, Grant, 167*
Harding, C. F., 260
Hortter, Fred. A., 387
Houlahan, P. H., 168*

Japp, Henry, 473*
Johnson, A. H., 261

Kendall, Artemus C., 491
Ketcham, C. H., 558

McCuen, J. P., 263
Meredith, Wynn, 295
Moir, E. N., 473*
Myers, Frank H., 685

Nettleton, William A., 460*
Neuffer, J. G., 717*

Olmstead, John Bartsow, 653*

Pearson, Sir W. D., 473*
Peters, Francis White, 427
Poore, George Arthur, 428

Riley, Chas. C., 296
Rine, Edwin M., 459

Stone, Everett E., 654*
Styles, C. E., 263

Vreeland, H. H., 166, 227

Wagenhorst, Otto Franklin
Wallace, H. U., 295
Walsh, J. R., 165

OBITUARY.

[Portraits are indicated thus*.]

Ames, John H., 580

Barber, L. W., 69
Barhydt, David P., 262
Berg, W. G., 667*
Bouton, N. S., 557
Brill, J. A., 490*

Carpenter, Samuel, 69
Clark, H. A., 427
Courtney, T. L., 135
Crane, W. B., Sr., 621

Dailey, Asa G., 262
Drinkwater, Chas., 621
Dun, James, 296*

Estes, W. E., 135
Evans, George F., 103
Ewart, W. D., 745*

Fanning, John F., 69
Farmer, L. P., 653
Folsom, Albert A., 71
Forney, M. N., 76, 82*
Francisco, Charles L., 231

Hallstead, William F., 296
Harding, Russell, 326, 371*
Hempstead, Chas. T., 326
Hill, Elmer E., 70
Hill, James B., 459
Holcomb, William Horace, 427
Huidekoper, Frederick W., 652

Kenney, Henry F., 103
Koppel, Arthur, 715

Layng, James D., 262

Martin, C. W., 69
Mercer, R. S., 295
Moran, W. E., 588
Murphy, William J., 716

Nichols, O. F., 186*

Palmer, Frank L., 103
Perkins, C. E., 277
Pitcher, W. A., 716

Rogers, Edward Payson, 35

Seaton, W. J., Jr., 231
Sellers, Dr. Coleman, 89*
Settlemyre, D. O., 684
St. John, Everitte, 589
Stanwood, Arthur G., 69
Surran, Walter L., 459

Tucker, Enos H., 69
Tull, Richard, 231

Urner, Henry C., 589

Washburne, William A., 326
Watts, Hall Wilson, 589
Wilson, John G., 522

ELECTIONS AND APPOINTMENTS.

- Acme, Red River & Northern, 135
 Alaska Central, 746
 Algoma Central & Hudson Bay, 524
 Annapolis, Washington & Baltimore, 231
 Ann Arbor, 70, 104, 523, 524
 Arkansas & Louisiana, 387
 Arkansas, Louisiana & Gulf, 71, 717
 Arkansas Midland, 523
 Astoria & Columbia River, 70, 387
 Atchison, Topeka & Santa Fe, 70, 104, 168, 523
 Atchison, Topeka & Santa Fe, Coast Lines, 70, 653
 Atlanta, Birmingham & Atlantic, 387
 Atlantic Coast Line, 589
 Augusta Southern, 387
- Baltimore & Ohio, 70, 167, 296, 558
 Baltimore & Ohio Southwestern, 231
 Beaumont & Great Northern, 35, 523
 Beaumont, Sour Lake & Western, 653
 Birmingham Southern, 387
 Boston & Albany, 70, 654
 Boston & Maine, 327, 387
 Brookhaven & Pearl River, 70, 71, 387
 Buffalo & Susquehanna, 72, 387, 427
 Buffalo, Rochester & Pittsburgh, 746
- Canadian Northern, 167, 199, 428, 491
 Canadian Northern Ontario, 70, 135
 Canadian Northern Quebec, 70, 135, 231, 522, 523
 (2), 524
 Canadian Pacific, 35, 70, 71, 167, 199, 231 (2),
 232, 262, 296 (2), 327 (2), 328, 387, 427,
 428 (2), 590, 746
 Canadian Railway Commission, 491
 Central of New Jersey, 387
 Central Vermont, 136, 523, 590
 Charlotte Harbor & Northern, 523
 Charleston & Western Carolina, 589
 Chattahoochee Valley, 523 (2)
 Chesapeake & Ohio, 35
 Chesapeake & Western, 746
 Chester, Perryville & Ste. Genevieve, 428
 Chicago & Alton, 35 (2), 71, 168, 327, 428, 653,
 716
 Chicago & Eastern Illinois, 558
 Chicago, Burlington & Quincy, 71, 136 (2), 168,
 232, 327, 387, 459, 492, 523, 717
 Chicago, Cincinnati & Louisville, 35
 Chicago Great Western, 71, 104, 168, 232, 327,
 388, 427
 Chicago, Indianapolis & St. Louis, 327
 Chicago, Milwaukee & St. Paul, 296, 653, 683 (2),
 717
 Chicago, Peoria & St. Louis, 71, 72
 Chicago River & Indiana, 104 (2)
 Chicago, Rock Island & El Paso, 232
 Chicago, Rock Island & Pacific, 35, 71, 232, 296,
 388, 428 (2), 460, 491, 653, 686, 746
 Chicago Terminal Transfer, 262
 Cincinnati, Hamilton & Dayton, 70, 387
 Cincinnati, New Orleans & Texas Pacific, 263, 427,
 523, 524
 Cleveland, Cincinnati, Chicago & St. Louis, 104,
 327, 491
 Coahuila & Zacatecas, 104
 Coal & Coke, 387
 Colorado & Southern, 523
 Colorado Southern, New Orleans & Pacific, 168,
 590, 653
 Colorado Springs & Cripple Creek, 523
 Cuba Eastern, 70
- Delaware & Eastern, 135, 232, 387, 428
 Delaware, Lackawanna & Western, 327, 387, 388,
 428, 459, 460, 491, 653 (2), 717
 Denver & Rio Grande, 428
 De Queen & Eastern, 387
 Detroit, Toledo & Ironton, 71, 523, 524
- East Broad Top Railroad & Coal Co., 558
 El Paso & Southwestern, 622, 717
 Erie, 263, 589, 622, 686 (2)
 Evansville & Terre Haute, 71
- Florence & Cripple Creek, 523
 Fort Smith & Western, 231, 263
 Fourche River Valley & Indian Territory, 296
- Georgia & Florida, 70, 522
 Georgia Coast & Piedmont, 522
 Georgia, Florida & Alabama, 685
 Grand Trunk, 36, 70, 71 (2), 327, 523, 558, 590,
 622
 Grand Trunk Pacific, 327, 589, 622, 717
 Great Northern, 136, 232, 428, 523
 Gulf, Colorado & Santa Fe, 71, 491, 558
 Gulf Line, 231, 387
- Halifax & Southwestern, 71
 Hocking Valley, 685
 Houston & Texas Central, 558
 Houston Belt & Terminal, 71
 Hudson & Manhattan, 71
- Idaho & Washington Northern, 387, 524
 Illinois Central, 263, 327, 427, 428 (2), 522, 523
 589, 653, 654 (2), 686, 717
 Illinois, Iowa & Minnesota, 71
 Indiana Harbor Belt, 716
 Indianapolis Southern, 522, 523
 Intercolonial, 231
 International & Great Northern, 35, 71, 104, 135,
 199 (3), 263, 296, 491
 Interstate Commerce Commission, 685
 Iowa Central, 717
 Iowa & St. Louis, 232
 Isthmian Canal Commission, 558
- Jamestown, Chautauqua & Lake Erie, 685
- Kalamazoo, Lake Shore & Chicago, 654
 Kalamazoo, Lake Shore & Michigan, 491, 622 (2)
 Kansas City Belt, 136
 Kansas City Southern, 35, 296, 428, 492, 685
- La Crosse & Southeastern, 522
 Lake Erie & Western, 327, 460, 491, 746
 Lake Shore & Michigan Southern, 71, 104, 716
 Lehigh Valley, 717
 Licking River, 387, 388
 Long Island, 589
 Louisville & Nashville, 590, 685
 Louisville, Henderson & St. Louis, 491
 Louisiana Western, 135, 231
- McCloud River, 387
 Macon & Birmingham, 231
 Macon, Dublin & Savannah, 522
 Maine Central, 135, 523
 Mexican Central, 71 (2), 232, 263, 297, 327 (2),
 387 (2), 427, 460, 523, 524, 717, 746
 Mexican International, 589
 Mexican Railway, 104, 622, 717
 Midland Terminal, 523
 Minneapolis, St. Paul and Sault Ste. Marie, 327
 Minneapolis & St. Louis, 231, 523
 Mississippi Central, 71, 231, 388
 Mississippi River, Hamburg & Western, 387
 Mississippi Valley, 231 (2)
 Missouri & North Arkansas, 558
 Missouri, Kansas & Texas, 35, 71
 Missouri, Kansas & Texas of Texas, 135
 Missouri, Oklahoma & Gulf, 522
 Missouri Pacific, 71, 104, 168 (2), 231, 263 (2),
 327 (2), 387, 388, 428 (2), 459, 622 (2),
 653 (2), 654, 746
 Mobile & Ohio, 104, 296
 Mobile, Jackson & Kansas City, 263, 427
 Morgan's Louisiana & Texas, 135, 231
 Morgantown & Kingwood, 388
 Morrissey, Fernie & Michel, 231
- National of Mexico, 296
 National Lines of Mexico, 459, 522, 558, 622
 National Transcontinental Railway Commission,
 524
 Nevada Northern, 558
 New York Central & Hudson River, 70, 71, 263,
 460 (2), 524, 654
 New York Central Lines, 70, 460
 New York, Chicago & St. Louis, 296, 491
 New York City Railway, 558
- New York, New Haven & Hartford, 231, 232, 263
 (2), 296, 327, 491, 492, 524, 558, 622
 New York Public Service Commission, First Dis-
 trict, 70
 New York State Public Service Commission, Sec-
 ond District, 70, 459, 558, 653
 Northern Central, 428
 Norfolk & Western, 327, 590
 Northern Pacific, 70, 135, 168 (2)
 Northwestern Pacific, 232
- Ohio River & Western, 232
 Ohio River & Columbus, 35
 Oklahoma Central, 522
 Orange & Northwestern, 232
 Oregon Short Line, 35
- Panama Railroad, 522
 Pennsylvania Lines West of Pittsburgh, 296,
 492, 590
 Pennsylvania State Railroad Commission, 104
 Peoria & Eastern, 71
 Peoria & Pekin Union, 387, 460, 522, 654
 Pere Marquette, 70, 167, 232
 Philadelphia & Reading, 296, 327, 523, 558, 654
 Portland & Seattle, 70
- Quebec & Lake St. John, 232, 522, 523 (2), 524
 Quincy, Omaha & Kansas City, 232
- Raleigh & Charleston, 388
 Raleigh & Southport, 388
 Rio Grande, Sierra Madre & Pacific, 71, 522, 523
- St. Joseph & Grand Island, 288, 622
 St. Joseph Valley, 263
 St. Louis & San Francisco, 35, 388, 622, 685
 San Antonio & Aransas Pass, 135, 231, 232, 654
 Sandy River and Rangeley Lake, 387
 San Pedro, Los Angeles & Salt Lake, 746
 San Pete Valley, 523
 Santa Fe Central, 387
 Saratoga & Encampment, 523, 622
 Seaboard Air Line, 35, 70, 104, 296, 523 (2), 590,
 654, 686
 Sierra Madre & Pacific, 523, 524
 Somerset Railway, 524
 South Side Elevated (Chicago), 70
 Southern, 71, 135, 168, 199 (2), 263, 427, 654
 (2)
 Southern Pacific, 135, 168, 263, 428, 492, 717
 Southern Railway & Navigation, 387
 Spokane, Portland & Seattle, 388
 Susquehanna & New York, 135, 231
- Tallulah Falls, 232
 Tampa & Jacksonville, 523
 Tampa Northern, 523
 Tehuantepec National, 524, 622
 Tennessee & North Carolina, 523
 Texas & Gulf, 491, 558
 Texas Midland, 71
 Tionesta Valley, 387
 Toledo & Ohio Central, 686
 Toledo, St. Louis & Western, 35, 71, 327
 Toledo Terminal Railroad, 70
 Tonopah & Goldfield, 104, 523, 558 (2)
 Tonopah & Tidewater, 71, 388
- Union Pacific, 199, 232, 460 (2), 622, 686
- Vera Cruz & Pacific, 686
- Wabash, 35
 Washington County, 135
 Washington, Idaho & Montana
 Waterloo, Cedar Falls & Northern, 72
 Western Allegheny, 231, 232
 Williamson, Greenville & St. Louis, 523
 Wisconsin Central, 199
- Yazoo & Mississippi Valley, 428

RAILROAD CONSTRUCTION.

- Aberdeen & Ashboro, 232
 Aberdeen & Tombigbee Valley, 461, 654
 Ajo Valley Railroad, 746
 Alabama Railway & Electric Co., 686
 Albany & Schoharie, 746
 Alexander & Eastern, 746
 Alexandria, Leesville & Lufkin, 746
 Alton, St. Louis & Cairo (Electric), 623
 Altus, Roswell & El Paso, 686
 American Railroad of Porto Rico, 297
 Arkansas, Louisiana & Gulf, 104, 654
 Arkansas, Oklahoma & Western, 36, 104
 Arkansas Roads, 590
 Atchison, Topeka & Santa Fe, 492
 Atlanta & St. Andrews Bay, 655
 Atlanta, Birmingham & Atlantic, 104, 623
 Atlanta, Norcross & Gainesville, 104
 Atlantic, Quebec & Western, 200, 297, 656
- Baltimore & Ohio, 72, 429
 Baton Rouge, Hammond & Eastern, 200, 297
 Bainbridge Northeastern, 590
 Bessemer & Lake Erie, 36, 655
 Blenville-Quitman, 461, 524
 Bingham Central, 655
 Birmingham & Gulf Railway & Navigation Co., 492
- Bitter Root, 746
 Black Mountain Railway, 686
 Blair Lumber Company's Road, 36
 Blue Ridge Traction, 232
 Boston & Albany, 686
 Boston & Maine, 200
 Bow River Collieries, 328
 Brinson Railway, 461
 British Columbia (Electric), 200
 Brooklyn Rapid Transit, 73
 Brownsville, Carmichaels & Waynesburg (Electric),
 169
 Brownsville, Masontown & Smithfield (Electric),
 169, 623, 686
 Buffalo & Lake Erie Traction, 590
 Buffalo Creek & Gauley, 36
 Buffalo, Rochester & Pittsburgh, 136, 717
 Burrard-Westminster Boundary, Railway & Navi-
 gation, 263
 Burrs Ferry, Brownell & Chester, 559
- Cairo & Kanawha, 73
 Cairo & Norfolk, 461
 Canada West Coal Companies Railroad, 73
 Canadian Northern, 136, 297, 492, 559, 590, 623,
 655, 686
- Canadian Northern Ontario, 104, 655, 687
 Canadian Pacific, 169, 200, 461, 492, 559, 590,
 655, 717
 Canadian River Railroad, 492
 Canadian Roads, 655
 Canadian Valley Railroad, 461, 590
 Cananea, Yaqui River & Pacific, 233, 429, 590, 655
 Cape Breton, 328
 Carolina, Clintchport & Ohio, 687
 Carolina Valley, 36
 Central California, 233
 Centralia Eastern, 169
 Central Ontario, 72
 Champlain & Sanford, 655
 Charlotte Harbor & Northern, 104
 Charleston, Parkersburg & Western, 200
 Chattahoochee Valley, 104
 Cherokee Belt & Interurban, 461
 Cherryvale, Oklahoma & Texas, 297
 Chesterfield & Lancaster, 264
 Chicago & Milwaukee (Electric), 104, 524
 Chicago & Wabash Valley, 36
 Chicago, Lake Shore & South Bend (Electric), 169,
 559, 718
 Chicago, Milwaukee & Gary, 429, 590

RAILROAD CONSTRUCTION—Continued.

- Chicago, Milwaukee & St. Paul, 104, 328, 461, 492, 623
 Chicago Railways Co., 328
 Chicago, Rock Island & Pacific, 461, 747
 Chicago, South Bend & Northern Indiana, 328, 559
 Cincinnati, Bluffton & Chicago, 136
 Clear Lake & Southern, 328
 Coal & Coke, 461
 Coast Line Railway, 233
 Colorado & Southern, 233, 687
 Colorado, Hereford & Gulf, 687
 Colorado, Oklahoma & Eastern, 429
 Colorado Roads, 655
 Colorado, Texas & Mexico, 559, 747
 Columbus & Erie, 233
 Columbus, Colorado & Mexico, 687
 Columbus, Magnetic Springs & Northern, 233
 Copper River & Northwestern, 524
 Cortland & Auburn, 233
 Cotton Belt, 747
 Crow's Nest & Northern, 328, 461
 Cumberland Railroad, 169
 Cumberland River & Nashville, 104
- Dansville & Bloomsburg Street Railway, 136
 Dansville & Mount Morris, 105
 Dayton, Lebanon & Cincinnati Railroad & Terminal Co., 136
 Delaware & Eastern, 687
 Delaware, Lackawanna & Western, 747
 Denver, Laramie & North Western, 297, 687
 Denver, North-Western & Pacific, 105
 Denver, North-Western & Pacific, 687
 Denver & Transcontinental, 105
 Duluth & Northern Minnesota, 36
 Duluth, Rainey Lake & Winnipeg, 429
 Durango & Sombrerete, 492
 Durham & Southern, 200
- Eastern British Columbia, 655
 East Carolina, 169
 Easton & South Bethlehem Transit Co., 328
 Edmonton & Slave Lake, 687
 Edmonton, Yukon & Pacific, 687
 El Paso & Southwestern, 559
 El Reno Red River & Pacific, 655
 Erie, 233
 Esquimalt & Nanaimo, 655
 Eureka Hill, 233
 Evansville Mt. Carmel & Olney Interurban, 297
 Evansville Terminal Railway, 655
- Fairchild & North Carolina, 200
 Fairchild & Northeastern, 264
 Florida Central, 36, 233
 Florida East Coast, 105
 Fort Wayne & Springfield Traction, 297
 Fourche River Valley & Indian Territory, 105
 Franklin & Clearfield, 559
 Frankfort, Delphi & Chicago Traction, 687
- Galveston Terminal, 233
 Georgia & Florida, 655
 Grand Rapids & Indiana, 36
 Grand Trunk, 525, 747
 Grand Trunk Pacific, 73, 105, 233, 297, 429, 461, 492, 559, 590, 623, 655
 Grand Valley (Electric), 591, 655
 Great American, 492
 Great Northern, 73, 429, 687
 Great Western, 525
 Greenville & Knoxville, 73
 Gulf, Colorado & Santa Fe, 105
- Hancock & East Branch, 687
 Harrisville & Cornwallis, 559, 623
 Hillsboro & Northeastern, 104
 Hornell & Dansville, 105
 Holston River Railway, 687
 Hudson Bay Pacific, 623
 Hudson Companies, 136
 Hudson & Manhattan, 136
- Idaho Northern Railroad, 525, 747
 Idaho & Washington Northern, 105
 Illinois Central, 200, 297, 493, 718
 Illinois, Iowa & Minnesota, 429
 Ilwaco Railroad, 73
 Indianapolis, Huntington, Columbia City & Northwestern, 233
 Indianapolis, Logansport & Chicago, 200
 Indianapolis, Logansport & Ohio, 328
 Indian Creek Valley, 105, 429
 Interborough Rapid Transit Co., 623, 747
 Inter-California, 233
 Interlake Railroad, 493
 Interstate Railway, 233
- Joliet & Southern Traction Co., 233
 Joplin & Pacific (Electric), 718
- Kanawha Central, 233
 Kansas City and Kansas Southwestern, 429
 Kansas City, Mexico & Orient, 136, 233, 559, 623, 655
 Kansas City Terminal, 328
 Kansas Southern & Gulf, 233
 Kentucky Midland, 36
 Kentucky & Ohio River, Interurban, 525, 623
 Kentucky & Tennessee, 233
 Kentucky North & South, 591
 Keweenaw Central, 169
 Kingsport & Bristol, 73
- Lake Erie & Youngstown (Electric), 591
 Lake Shore & Michigan Southern, 429, 493, 559
 Lake Superior & Ishpeming, 105
 Laramie, Hahn's Peak & Pacific, 105, 233, 591
 Lima & Toledo Traction, 233, 461
 Lincoln Northern Railway, 233
 Little River, 36
 Little Rock, Maumelle & Western, 73
 Long Island, 328
 Los Angeles & San Francisco, 461
 Los Angeles Harbor Co., 461, 655
 Los Angeles Harbor Railroad Co., 461, 655
 Louisiana & Pine Bluff, 36
 Louisville & Atlantic, 73
 Louisville & Nashville, 73
- Manistee & Northeastern, 493
 Manistique, 233
 Maryland Electric, 687
 Massillon, Wooster & Mansfield Traction, 137
 Matamoros & Santa Cruz St. Railway, 297
 Memphis, Paris & Gulf, 297
 Memphis & State, 297
 Mexican Central, 105, 297, 591
 Mexican International, 493, 623
 Mexico Milling & Transportation Co., 328
 Mexican Pacific Coast, 233, 591
 Mexican Railway, 430
 Mexican Roads, 105, 429, 461, 493, 559, 591, 747
 Mexico, Santa Fe & Perry Traction, 169
 Milwaukee Terminal Ry., 623
 Mingo & Monongahela, 105
 Minidoka & Southwestern, 36
 Minneapolis, St. Paul & Sault Ste. Marie, 137, 591
 Mississippi Central, 200
 Missouri & North Arkansas, 200, 525, 718
 Missouri Southern, 105
 Moline, Rock Island & Eastern Traction, 430
 Montana Railroad, 105, 298
 Morehead & North Fork, 36
 Morgantown & Dunkard Valley (Electric), 169
 Morgantown Interstate (Electric), 169
 Mountain Central, 36, 169
 Mountain Home & White River, 655
 Myersdale Construction & Equipment Co., 687
- Nashville & Huntsville, 655
 Nebraska, Kansas & Southern, 687
 Nevada-California-Oregon, 73
 Nevada County Narrow Gauge, 105, 233
 Nevada Northern, 137, 525
 New Orleans Great Northern, 559
 New York & Long Island, 718
 New York & North Shore Traction, 137
 New York, Auburn & Lansing (Electric), 73
 New York, Canadian & Pacific, 747
 New York Central & Hudson River, 655, 687
 New York Subways, 73, 105, 137, 200, 493, 655, 747
 Norfolk & Southern, 233
 North Midland (Electric), 747
 Northern Dakota, 264, 493
 Northern Electric, 264
 Northern of Maine, 200
 Northwestern Railroad, 36, 718
- Ocean Shore Electric, 655
 Ohio Electric Railway, 233, 461, 655, 747
 Ohio River & Northern, 655
 Ohio Roads, 559
 Oklahoma Central, 525
 Oklahoma-El Reno Interurban, 655
 Oklahoma, El Reno & Shawnee (Electric), 747
 Orange & Southwestern, 656
 Oregon Eastern, 233, 747
 Oregon Electric, 264, 623, 687
 Oregon Railroad & Navigation, 36, 73, 233
 Oregon Short Line, 36, 718
 Oregon, Washington & Idaho, 36, 73
 Oregon Western, 233
 Osceola, Little River & Western, 73
 Owensboro & Rockport Bridge & Terminal Co., 200
- Pacific & Eastern, 105
 Pacific & Southeastern, 656
 Paducah Northern, 200
 Pan-American, 137, 656
 Panhandle Short Line, 264, 591
 Parral & Durango, 200
 Payette Valley, 200
 Peach River & Gulf, 687
 Pecos & Balmorhea, 461
 Peninsula Railway, 36, 200, 233
 Pennsylvania, 137, 328, 559, 656, 747
 Pennsylvania & Maryland Street (Electric), 36
 Pennsylvania Lines West, 36, 329, 656, 747
 Pennsylvania Roads (Electric), 591
 Pennsylvania Tunnel & Terminal, 329
 Perkiomen Traction, 264
 Philadelphia, Baltimore & Washington, 329
 Philadelphia & Reading, 233
 Pine Mountain Railroad, 73
 Pittsburgh, Binghamton & Eastern, 105, 169, 298
 Pittsburgh, Canonsburg & Washington, 264
 Pittsburgh, Shawmut & Northern, 73, 525, 559
 Pleasantville Electric Traction, 591
 Port Angeles Railway & Terminal, 687
 Port O'Connor Rio Grande & Northern, 559
 Portland, Eugene & Eastern, 233
 Port Simpson & Fort Churchill, 233
 Prince Rupert & Port Simpson, 560
 Public Belt Line, 264
- Quebec & New Brunswick, 200
 Quebec Eastern, 329
- Randolph & Cumberland, 105
 Red Bud & Belleville Interurban, 169
 Rio Grande Railroad, 298
 Rio Grande, Sierra Madre & Pacific, 747
 Robert Lee, Fort Chadburne & Eastern, 200
 Rochester, Corning & Elmira, 623, 718
 Rockport, Langdon & Northern, 624
 Rome & Osceola, 493, 624
 Roodhouse & Virden Railway, 200
 Roscoe Snyder & Pacific, 560
 Ruston, Natchitoches & Northeastern, 462, 624
- Sacramento Valley & Eastern, 234, 264
 St. Joseph, Savannah & Northern, 264
 St. Joseph Valley Railway, 234
 St. Joseph Valley Traction, 234
 St. Louis & Oklahoma Southern, 169
 St. Louis & San Francisco, 656
 St. Louis, Brownsville & Mexico, 656
 St. Louis, Terre Haute & Quincy Traction, 200
 Salem-Mehama, 234
 Salt Lake & Ogden, 73
 San Diego & Arizona, 264, 493, 560
 San Diego Eastern, 264
 San Francisco & Bay Counties Railway, 462
 San Francisco, Oakland & San Jose, 462
 San Francisco, Oakland & San Jose, Consolidated, 462
 San Francisco, Idaho & Montana, 105
 San Juan, Taviache & Oaxaca, 493, 747
 Santa Fe Liberal & Englewood, 493
 Saratoga & Encampment, 718
 Savannah, Augusta & Northern, 200
 Schenectady & Margaretville, 688
 South & North Alabama, 73
 South & Western, 73
 South Dakota Central, 234, 718
 South Dakota Roads (Electric), 688
 South Omaha & Western, 36, 718
 Southern Pacific, 169, 234, 329, 430, 591, 747
 Southern Pacific (Mexico), 656
 Southern Railway, 718
 Southwestern Railway of Texas, 656
 Spokane, Portland & Seattle, 462, 525, 624
 Spokane & Inland Empire (Electric), 201
 Stephenville North & South Texas, 105
 Steubenville & East Liverpool, 624, 688
 Sugar Creek & Northern, 747
 Susquehanna & New York, 169
 Swan Creek Railway, 73
- Tacoma Eastern, 430
 Tampa Northern, 201
 Terre Haute, Robinson, Olney & Southwestern, 656, 747
 Texas & Pacific, 656, 747
 Texas Northern, 748
 Texas Roads, 298, 748
 Texas State, 105
 Toledo, St. Louis & New Orleans, 36
 Topeka & Northwestern, 36
 Toronto, Hamilton & Buffalo, 105
 Tremont & Gulf, 105
 Trinity County Lumber Company, 748
 Tuscaloosa Belt Railway, 201
- Umatilla Central, 36
 Union Central, 234, 688
 Union Industrial, 656
 Union Pacific, 36, 718, 748
 United Traction Co., 36
 Union Traction Co., 298
- Valley River, 201
 Vancouver Island & Eastern, 624, 748
 Vancouver, Victoria & Eastern, 73, 688
 Vancouver, Westminster & Yukon, 688
 Van's Harbor Land & Lumber Company's Road, 105
 Vera Cruz Terminal, 688
 Versailles & Sedalia, 73
 Victoria Terminal Railway & Ferry Co., 688
 Virden & Taylorville Traction, 201
 Virginia & Southwestern, 688
 Virginia Air Line, 73
- Walcottville & Coldwater, 201
 Washington, Baltimore & Annapolis, 560
 Washington, Patuxent & Drum Point, 656
 Washington Roads (Electric), 624
 Washington, Westminster & Gettysburg, 73
 Waterloo, Perla & Southwestern, 105
 West Jersey & Seashore, 329
 West Texas & Northern, 298
 Westchester & Wilmington (Electric), 656
 Western & Atlantic, 461
 Western Allegheny, 36, 656
 Western Illinois & Iowa (Electric), 201
 Western Pacific, 36, 624
 Wheeling & Lake Erie, 105, 748
 Wichita Falls & Northwestern System, 105
 Wichita Valley, 688
 Wilmington & Westchester (Electric), 137
 Wisconsin Central, 560
 Wisconsin & Northern, 73
 Wolf, Meganite & Lotbiniere, 201
 Woodstock, Marengo, Genoa & Sycamore (Electric), 169
 Woodville Railroad, 73
- Yazoo & Mississippi Valley, 298, 718
 Yellowstone Park, 36
 York (Pennsylvania), Railway, 493
 Youngstown & Ohio River (Electric), 656
 Youghiogheny & Cheat River, 591

RAILROAD CORPORATION NEWS.

- Alaska Central, 748
 Albany & Hudson, 430
 Arkansas, Oklahoma & Western, 106
 Atchison, Topeka & Santa Fe, 73, 201, 329, 493, 656
 Atlanta & Carolina, 748
 Atlantic Coast Line, 298, 430, 748
 Bainbridge Northeastern, 462, 591
 Baltimore & Ohio, 73, 106, 137, 169, 298, 329, 430, 560, 591
 Birmingham & Gulf Railway & Navigation Co., 493
 Boston & Albany, 624
 Boston & Maine, 73, 106, 137, 169, 388, 591
 Boston & Worcester Street, 169
 Brinson Railway, 462
 Brooklyn Rapid Transit, 462
 Buffalo, Rochester & Pittsburgh, 137, 201, 525, 560, 591, 624, 688
 Calumet & South Chicago (Electric), 718
 Camden & Trenton, 298
 Canadian Northern, 298
 Canadian Northern Ont., 656
 Canadian Pacific, 73, 201, 298, 329, 525, 624
 Carolina, Clinchfield & Ohio, 430, 525
 Central of Georgia, 388
 Chesapeake & Ohio, 201, 525, 591, 624, 748
 Chesapeake Western, 624
 Chicago & Alton, 137, 718
 Chicago & Eastern Illinois, 718
 Chicago & Illinois Western, 73
 Chicago & Milwaukee Electric, 201, 388, 525, 560
 Chicago & Western Indiana, 201
 Chicago Burlington & Quincy, 748
 Chicago, Cincinnati & Louisville, 264, 493
 Chicago City Railway, 525
 Chicago Great Western, 74, 137, 493
 Chicago, Indiana & Southern, 462, 591
 Chicago, Joliet & Kansas, 688
 Chicago Junction Railway, 493
 Chicago, Milwaukee & Gary, 388, 592
 Chicago, Milwaukee & St. Paul, 169, 201, 592, 748
 Chicago Railways, 201, 329, 388, 688
 Chicago, Rock Island & Pacific, 71, 137, 170, 329, 388, 525
 Chicago, St. Paul, Minneapolis & Omaha, 430
 Chicago Terminal Transfer, 74, 106
 Chicago Union Traction, 493
 Cincinnati & Muskingum Valley, 74
 Cincinnati, Bluffton & Chicago, 430
 Cincinnati, Hamilton & Dayton, 74, 462, 525
 Cincinnati, New Orleans & Texas Pacific, 624
 Cleveland & Marietta, 74
 Cleveland, Cincinnati, Chicago & St. Louis, 170
 Cleveland, Lorain & Wheeling, 170
 Colorado & Southern, 74, 201, 493
 Columbia River & Northern, 560
 Connecticut Railway & Lighting, 170
 Cripple Creek Central, 106
 Cuba Railroad, 560
 Dayton & Xenia, 430
 Delaware & Hudson, 170, 201, 298, 330, 493, 525, 560
 Denver & Rio Grande, 493, 688, 718
 Denver, North-Western & Pacific, 137
 Detroit, Toledo & Ironton, 201, 234, 330, 388
 Erie, 106, 298, 330, 388, 462, 494, 525, 560, 592, 688
 Erie Traction, 137
 Fitchburg Railroad, 592
 Florida East Coast, 170
 Galveston Terminal Railway, 592
 Georgia Southern & Florida, 201
 Grand Trunk, 330
 Grand Trunk Pacific, 201, 462, 494
 Great Northern, 234, 388, 430, 494, 560, 592
 Green Bay & Western, 137
 Greenwich & Johnsonville, 688
 Gulf & Chicago, 74
 Gulf & Ship Island, 106, 201, 330, 494, 592
 Havana Central, 718
 Hocking Valley, 202, 330, 525
 Houston Belt & Terminal, 202
 Hudson & Manhattan, 170, 264
 Hudson Companies, 264
 Idaho Northwestern, 656
 Illinois Central, 170, 202, 234, 264, 298, 388, 430, 560, 592, 688
 Illinois, Iowa & Minnesota, 388
 Indiana Harbor Belt, 494
 Interborough-Metropolitan, 298
 Interborough Rapid Transit, 330, 388, 592, 624
 Intercolonial, 525
 International & Great Northern, 138, 202, 298, 389, 430, 462, 560, 592, 688
 International Traction, 138
 Iowa Central, 624
 Kansas City, Fort Scott & Memphis, 688
 Kansas City, Mexico & Orient, 264, 560
 Kansas City Southern, 138, 298, 462
 Lake Shore & Electric, 430
 Lake Shore & Michigan Southern, 560, 592
 Leavenworth, Kansas & Western, 494
 Lehigh & Hudson River, 430, 525
 Lehigh & New England, 462
 Lehigh Coal & Navigation, 430, 462
 Lehigh Valley, 494, 560, 592
 Little Kanawha, 592
 Long Island, 298
 Louisiana & Arkansas, 202, 330, 494
 Louisville & Nashville, 74, 138, 234, 330, 525
 Macon & Birmingham, 202
 Macon, Dublin & Savannah, 525
 Maine Central, 748
 Manhattan Railway (Elevated), 718
 Metropolitan Street Railway, 494, 525, 592, 688
 Metropolitan West Side Elevated Railway (Chicago), 688
 Mexican Central, 202, 525, 592
 Mexican International, 330
 Mexican Southern, 462
 Midland Valley, 688
 Michigan Central, 106
 Minneapolis, St. Paul & Sault Ste. Marie, 202, 430, 526, 624
 Mississippi Valley, 138
 Missouri & North Arkansas, 526
 Missouri, Kansas & Texas, 138, 656, 748
 Missouri, Oklahoma & Gulf, 624
 Missouri Pacific, 106, 170, 624
 Mobile & Ohio, 389
 Mobile, Jackson & Kansas City, 74
 Mohawk Valley, 106, 138
 National of Mexico, 526
 National Railways of Mexico, 170, 202, 264, 330, 430, 494, 526, 560, 592, 656
 Nevada Central, 138
 New England Investment & Security Co., 592
 New Orleans, Mobile & Chicago, 74, 264
 New Orleans Terminal, 462
 New York & Long Island, 718, 748
 New York Central & Hudson River, 106, 138, 170, 430, 592, 624, 748
 New York Central Lines, 74, 106, 138, 330, 462, 526, 592
 New York, Chicago & St. Louis, 170, 298
 New York City Railway, 74, 170, 202, 430, 494, 526, 592, 718
 New York Connecting, 592
 New York, New Haven & Hartford, 74, 138, 170, 202, 264, 330, 388, 592, 624, 656, 688, 718, 748
 New York, Ontario & Western, 170, 330, 526
 New York-Philadelphia Company (Electric), 170, 330
 Norfolk & Southern, 234
 Norfolk & Western, 202, 388, 526, 624
 Northern Electric, 138
 Northern Pacific, 430, 560, 592
 Northern Securities, 106
 Northern Texas Traction, 718
 Ohio Connecting, 74
 Ohio Electric Railway, 462
 Pacific Coast Company, 494
 Paterson Railway (Electric), 592
 Pennsylvania, 106, 202, 330, 494, 560, 592, 656
 Pennsylvania Company, 74
 Pennsylvania Lines West, 138, 748
 Peoria & Bureau Valley, 138
 Pere Marquette, 298, 330, 462
 Philadelphia & Reading, 330
 Philippine Railway, 494
 Phillips & Rangeley, 234
 Pittsburgh & Lake Erie, 170, 592, 688
 Pittsburgh, Cincinnati, Chicago & St. Louis, 298, 462, 592
 Pittsburgh, Shawmut & Northern, 138
 Portland & Seattle, 389
 Portland & Southeastern, 138
 Public Service Commission of New Jersey, 688
 Quebec, Montreal & Southern, 170
 Reading Company, 202, 494, 560
 Rock Island Company, 494, 526
 Rogers Southwestern, 106
 St. Louis & San Francisco, 170, 202, 688
 St. Louis, Brownsville & Mexico, 202, 430
 Sandy River, 234
 Sandy River & Rangeley Lakes, 389
 San Francisco, Oakland & San Jose Consolidated, 748
 Seaboard Air Line, 74, 106, 330, 430, 526, 624, 748
 Seattle Electric, 718
 South & Western, 430
 Southern, 74, 202 (2), 330, 430, 494, 656, 688
 Southern Pacific, 106, 202, 389, 526, 748
 Southern Railway, 718
 Spokane International, 624
 Spokane, Portland & Seattle, 389, 560
 Tallulah Falls, 74, 202
 Temiscouata Railway, 494
 Texas & Pacific, 138, 264, 298, 389, 430, 462, 526, 592
 Third Avenue R. R., 74, 138, 202, 494, 526
 Toledo & Chicago Interurban, 264
 Toledo & Indiana (Electric), 74, 526
 Toledo & Ohio Central, 106, 202, 688
 Toledo Terminal Railroad, 106
 Toledo, Walhonding Valley & Ohio, 74
 Tonopah & Tidewater, 718
 Tuscaloosa Belt, 494
 Underground Electric of London, 560, 592, 748
 Union Pacific, 106, 170, 202, 298, 330, 389, 494, 656
 United Railways Investment Co., 462
 United Railways of St. Louis, 656, 748
 United States Express, 592
 Vandalia, 106
 Virginia & Southwestern, 656
 Virginian Railway, 718
 Wabash, 592
 Wabash Pittsburgh Terminal, 389
 Waterloo, Cedar Falls & Northern, 624
 West Jersey & Seashore, 330
 Western Maryland, 688
 Western Pacific, 688
 Westchester Traction, 430
 Western Maryland, 389, 748
 Zanesville & Western, 106

